

inwards like an isosceles triangle, with the apex pointing backwards, and reaching back to the fore legs, and nearly to the posterior termination of that segment. *Abdomen* flattish, with ten segments, all arranged telescopically, each fitting into that before it, slightly convex above, concave below, perhaps from shrinkage; marginal separation between the upper- and underside distinct; anal segment small and open at the apex. A depressed line runs down the middle of the back of the whole larva; and there are hairs along the sides. *Stigmata* apparently angular in shape, and eight pairs in number: there are none on the last two segments; and the appearance of those in the first two segments is not so distinct as in the six that follow. *Legs* not very short, terminating in a single pointed article.

The colour is pale fawn, except the head, which is brownish.

For convenience of reference and provisionally, until the perfect form of this insect be known, I have named it *Astraptor illuminator*, from ἀστραπή, a flash of lightning.

#### EXPLANATION OF PLATE I.

Fig. 1. Larva of *Astraptor illuminator*, natural size.

Fig. 2. Ditto, magnified.

Fig. 3. Underside of head of No. 1 (magnified).

Fig. 4. Ditto (more highly magnified).

Fig. 5. Upperside of head magnified.

Fig. 6. Hind leg, magnified.

Fig. 7. Side of part of abdomen, magnified.

Fig. 8. Larva of *Alaus oculatus*, natural size.

Fig. 9. Larva of *Photuris versicolor*, natural size.

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Catalogue of the Homopterous Insects collected in the Indian Archipelago by Mr. A. R. WALLACE, with descriptions of new species. By FRANCIS WALKER, Esq., F.L.S.

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Ord. CICADINA, *Burmeister*.

Fam. STRIDULANTIA, *Burm.*

Gen. PLATYPLEURA, *Amyot et Serv.*

1. PLATYPLEURA CATOCALOIDES, n. s. *Fem.* Viridis, testaceo varia; capite linea transversa incisa liturisque duabus lateralibus anticis nigris; prothorace vitta guttisque quatuor nigris; mesothorace vittis

duabus obliquis, lituris quatuor guttisque duabus nigris; abdomine linea guttulari fasciisque interruptis piceis; alis anticis pallide cinereis, annulis variis elongatis liturisque subcostalibus fuscis, strigis marginalibus obscurioribus, lituris duabus subcostalibus albidis elongatis; alis posticis ochraceis, strigis duabus margineque nigricantibus.

*Female.* Green, partly testaceous. Head with a notched transverse black line, which includes the ocelli; face black on each side next the front. Prothorax with a black stripe, which is broadest at its hind end; two black dots on each side, one in the disk, the other next the border, which is dilated and obtusely angular on each side. Mesothorax with four longitudinal black marks on the fore border; two black dots on the hind border, opposite to the inner marks, which are broader than the outer pair; a black oblique stripe on each side. Abdomen with a piceous band on the fore border of each segment; these bands are interrupted in the middle, where there is a row of piceous dots. Fore wings pale cinereous, sericeous, long, narrow, with several fusiform longitudinal brown ringlets of various sizes; some of these are incomplete; a row of short, darker brown streaks along the exterior border, the hinder streaks forming ringlets; some brown subcostal marks; two elongated, whitish, subcostal marks. Hind wings ochraceous; blackish-bordered; two blackish streaks in the disk, the fore one capitate. Length of the body 10–10½ lines; of the wings 30–32 lines.

*Hab.* Amboina; Ceram; Morty.

Most allied to *P. hilpa* (Cat. Hom. i. 6), from which it may be distinguished by the streaks on the fore wings, which are paler and have not the complete hyaline band of the latter species.

#### Gen. OXYPLEURA, *Amyot et Serv.*

2. OXYPLEURA CANESCENS. *Fœm.* Testacea, cano pubescens; capite fasciis duabus nigris, 1<sup>a</sup> excavata, 2<sup>a</sup> tenui; prothorace nigro-marginato, lateribus rectangulatis; mesothorace maculis quatuor nigris obconicis; abdomine fasciis apiceque nigris; tarsis piceis; alis diaphanis, costa testacea, venis fulvis, venis transversis venisque marginalibus nonnquam fusco nebulosis.

*Female.* Testaceous, with hoary pubescence, probably pale green when recent. Head with two irregular black bands; first band between the eyes, much excavated; second in front, very narrow. Prothorax bordered with black and dilated into a right angle on each side. Mesothorax with four obconical black spots which rest on the fore border, the outer pair very large. Abdomen with a black band on the fore border of each segment; tip black. Tarsi piceous. Wings pellucid; costa testaceous; veins tawny; transverse veins and mar-

ginal veins sometimes clouded with brown. Length of the body 11 lines; of the wings 36 lines.

*Hab.* Arn; Celebes.

Gen. TOSENA, *Amyot et Serv.*

3. TOSENA FASCIATA, *Amyot et Serv. Hist. Nat. Hém.* 462.

*Hab.* Sumatra; inhabits also Java.

Gen. DUNDUBIA, *Amyot et Serv.*

4. DUNDUBIA IMPERATORIA. See vol. i. p. 83.

*Hab.* Penang; inhabits also Cambodia, Laos, Siam, Sumatra, and Borneo.

5. DUNDUBIA VAGINATA, *Amyot et Serv. Hist. Nat. Hém.* 471.

*Hab.* Morty; inhabits also Assam.

6. DUNDUBIA VIBRANS, *Walk. Cat. Homopt.* pt. i. 54.

*Hab.* Ceram; inhabits also Silhet.

7. DUNDUBIA BICAUDATA, *Walk. Cat. Hom.* pt. v. 9.

*Hab.* Sula; inhabits also Ceram.

8. DUNDUBIA LINEARIS, *Walk. Cat. Hom.* pt. i. 48; var. *cinctimanus*, pt. i. 49; var. *ramifera*, pt. i. 53.

*Hab.* Arn; inhabits also Silhet.

9. DUNDUBIA FULIGINOSA, *Walk. Cat. Hom.* pt. i. 60; *Melpomene*, p. i. 76.

*Hab.* Celebes; Tondano; inhabits also the Philippine Isles.

10. DUNDUBIA NEBULILINEA. *Fæm.* Viridescenti-testacea; capite lituris duabus frontis nigris, strigis faciei transversis lateralibus piceis; prothorace lineis duabus nigris indeterminatis; mesothorace lineis duabus piceis arcuatis; segmentorum abdominalium marginibus anticis piceis; alis anticis stigmatate late flavo, guttis tribus apud venas transversas guttisque submarginalibus fuscis, strigis submarginalibus pallidissime fuscis.

*Female.* Testaceous, partly greenish about the sides of the thorax.

Head with a transverse black mark on each side of the front; orbits of the ocelli black; face with transverse piceous streaks along each side. Prothorax with a black line along the fore border; the two usual black lines very incomplete; fore border and hind border of the postscutellum black. Mesothorax with two slightly curved piceous lines, which are united behind, where they form a deep curve. Abdomen with a piceous line along the fore border of each segment; tomentum shining, cinereous. Fore tibiæ and anterior tarsi piceous. Wings pellucid; veins ochraceous, partly black; stigma bright yellow; first, second, and third transverse veins clouded with dark brown;

a pale brown fusiform dot on each of the seven marginal veins; a still paler diffuse brown streak in each of the marginal areolet. Length of the body 12 lines, of the wings 36 lines.

*Hab.* Sumatra.

Much allied to *D. bicaudata*; but there is no transverse black line on the head, and the thorax is nearly without markings, the second marginal areolet is much shorter, and the first and second transverse veins are much less oblique.

11. *DUNDUBIA RECEDENS.* *Mas.* Subviridi-testacea; capite guttis duabus, frontis vitta brevi strigisque transversis lateralibus faciei nigris; prothorace lineis duabus strigisque duabus arcuatis nigris; mesothorace nigro, vittis quatuor spatiumque postico testaceis; abdomine nigro, segmentis fulvo marginatis, subtus apice albo; operculis viridibus, abdominis bis triente non brevioribus; alis anticis stigmatibus pallide testaceo, venis transversis 1<sup>a</sup> et 2<sup>a</sup> nigrisante nebulosis.

*Male.* Testaceous, slightly tinged with green. Head black about the ocelli; a transverse black dot on each side in front; face with a short black middle stripe and with transverse black streaks along each side. Prothorax with two black lines, which diverge from each other towards the fore border and towards the hind border; a black curved streak on each side in the disk; sutures black. Mesothorax black; four stripes and hind part testaceous. Abdomen black; hind borders of the segments more or less tawny; underside white at the tip. Ventral opercula green, about two-thirds of the length of the abdomen. Femora and fore tibiae striped with black; anterior tarsi black. Wings pellucid; veins black, testaceous or green towards the base; stigma pale testaceous; first and second transverse veins clouded with blackish. Length of the body 11 lines, of the wings 34 lines.

*Hab.* New Guinea.

The opercula are shorter than those of *D. fuliginosa*, and have no black band.

12. *DUNDUBIA LATILINEA.* *Fam.* Testacea; capite fascia lata bis interrupta strigisque faciei transversis lateralibus nigris; prothorace lineis duabus flexis strigisque duabus obliquis nigris; mesothorace vittis quinque latis guttisque duabus nigris; abdominis segmentis nigro marginatis, segmentis 1<sup>o</sup> 2<sup>o</sup>que rufescentibus nigro unimaculatis; alis anticis venis transversis 1<sup>a</sup> 2<sup>a</sup>que venisque marginalibus 1<sup>a</sup> 2<sup>a</sup> 3<sup>a</sup>que apice fusco nebulosis.

*Female.* Testaceous. Head reddish on each side in front; a broad irregular black band which includes the ocelli and is interrupted on each side; face with transverse black streaks along each side, wholly black towards the mouth. Prothorax with two black lines which



diverge from each other towards the fore border and towards the hind border, and are much dilated towards the fore border; a black oblique streak on each side; postscutellum with a black line along the fore border, and another along the hind border; the first line widely interrupted in the middle, dilated on each side. Mesothorax with five broad black stripes, middle stripe contracted in the middle; inner pair very widely interrupted, and consisting of a streak in front and a dot near the hind border; a black dot on the fore border between the inner pair and the outer pair. Abdomen with shining pale green tomentum; hind borders of the segments black; first and second segments reddish, each with a somewhat triangular black spot. Fore tibiae and anterior tarsi piceous. Wings pellucid; veins black, reddish towards the base; first and second transverse veins clouded with dark brown; costa brown; tips paler brown; first, second, and third marginal veins clouded with pale brown at their tips. Length of the body 15 lines, of the wings 46 lines.

*Hab.* Penang.

It has much resemblance to *D. fuliginosa*, but the markings of the thorax are very different.

13. *DUNDUBIA IMPAR*. *Mas.* Viridis, testaceo varia; capite annulis duobus, guttis duabus, linea brevi punctisque transversis lateralibus nigris; prothorace lineis duabus valde interruptis punctisque duobus nigris; mesothorace vittis quinque (una integra) maculisque duabus lanceolatis nigris; abdomine fulvo, macula basali nigra magna, segmentis viridi marginatis, fascia ventrali nigra integra, fasciis ventralibus piceis interruptis; operculis abdominis bis triente non brevioribus; alis nticis maculis duabus nigricantibus elongatis apud venas transversas. *Var. β.* Mesothoracis vittis integris. *Fam.* Testacea, mesothoracis vitta media nonnunquam interrupta, abdomine punctis lateralibus maculisque duabus lateralibus lanceolatis nigris.

*Male.* Green. Head and thorax more or less testaceous. Head with a black ringlet about each of the ocelli, and with two elongated black dots on each side of the front; face with a middle abbreviated black line, and with transverse black points along each side. Prothorax with two black lines as in the preceding species, but the lines are much interrupted; a black point on each point; sutures partly black. Mesothorax with five black stripes; middle stripe entire; inner pair composed of a streak and a hinder spot, the streak dilated at its hind end and slightly curved; outer pair interrupted near the fore border, much excavated in the middle; a lanceolate black spot on the fore border between the inner pair and the outer. Abdomen tawny; hind borders of the segments green; a large black spot at the base; underside with interrupted piceous bands; an entire hinder black band. Ventral opercula full two-thirds of the length of the abdomen. Anterior tarsi

with piceous tips. Wings pellucid; veins ochraceous, varied with black; first and second transverse veins with elongated blackish spots. *Var. β.* Lines of the prothorax entire. *Female.* Testaceous. Middle stripe of the mesothorax sometimes interrupted; outer pair very much interrupted. Abdomen with black points along each side above and beneath; a black lanceolate spot on each side near the tip; underside with a black middle spot near the tip. Length of the body 11-12 lines, of the wings 36-38 lines.

*Hab.* Waigiou.

It has more resemblance than *D. latilinea* to *D. fuliginosa*, but may be distinguished by the breadth of the lines on the thorax, and the face is much less prominent.

14. *DUNDUBIA LATA.* *Mas.* Testacea, lata; capite litura transversa nigra; prothorace fascia antica angusta abbreviata punctisque duobus posticis nigris; mesothorace vittis quinque (una integra) strigisque duabus lanceolatis nigris; abdomine piceo, subtus fulvo; operculis abdominis dimidio non brevioribus, albo marginatis, fasciis duabus, 1<sup>a</sup> fusca, 2<sup>a</sup> nigricante; alis anticis lituris apud venas transversas liturisque submarginalibus fuscis.

*Male.* Testaceous, broad. Head black between the ocelli and with a transverse black mark on the face next the front. Prothorax with a narrow abbreviated black band on the fore border, and with two black points on the hind border of the scutellum. Mesothorax with five slender black stripes; middle stripe fusiform towards the hind border; inner pair widely interrupted, consisting of a clavate streak in front, and of a dot near the hind border; outer pair widely interrupted, forming a point on the fore border and a posterior streak; a little lanceolate black streak on the fore border between the inner pair of stripes and the outer pair. Abdomen piceous, tawny beneath. Ventral opercula white-bordered, full half the length of the abdomen, with two broad bands; first band brown; second blackish. Wings pellucid; transverse veins, from the first to the fourth, clouded with dark brown; vein along the apical hind part of the second discoidal areolet clouded with dark brown; a fusiform dark brown spot on each of the seven marginal veins; veins pale ochraceous, with a few black marks. Length of the body 19 lines, of the wings 54 lines.

*Hab.* Bouru.

The head is broader than that of *D. linearis*; the opercula are longer and are black towards their tips. It has most resemblance to *D. obtecta*; but the markings and the hind part of the thorax are very different.

15. *DUNDUBIA SUBAPICALIS.* *Mas.* Testacea; capite linea transversa, strigis transversis lateralibus strigaeque longitudinali faciei nigris; prothorace lineis duabus obliquis, vittis duabus obliquis gut-

tisque duabus nigris, guttis duabus fuscis; mesothorace vittis quinque (quatuor interruptis) strigisque duabus interruptis nigris; abdomine vittis quinque fuscis macularibus, fascia subapicali nigra; operculis abdominis his triente vix brevioribus; alis anticis guttis tribus apud venas transversas guttisque septem submarginalibus nigris.

*Male.* Testaceous. Head with a transverse hardly undulating black line, which is dilated in the middle and includes the ocelli; an entire black line on the hind border; face with a short longitudinal black streak, and with transverse black streaks along each side. Prothorax with two black lines, which diverge from each other and are dilated towards the fore border and towards the hind border; a brown dot on each side in the disk; an exterior black dot on each side near the hind border; two black oblique lateral stripes. Mesothorax with five black stripes; middle stripe entire; inner pair widely interrupted towards the hind border; outer pair interrupted in front, and abbreviated near the hind border; a black interrupted streak proceeding from the fore border between the two inner and the two outer stripes. Abdomen with shining cinereous tomentum and with five stripes of brown spots; basal spot of middle stripe black, large, elongate conical; a black subapical band; two apical spines. Ventral opercula extending to nearly two-thirds of the length of the abdomen. Tarsi black. Wings pellucid; veins ochraceous, partly black; an elongated blackish dot on each of the transverse veins from the first to the third, and on each of the seven marginal veins. Length of the body 11 lines, of the wings 38 lines.

*Var. β.* Capite linea transversa, strigis transversis lateralibus lineaque faciei nigris; prothorace lineis duabus obliquis, lituris duabus clavatis vittisque duabus obliquis nigris; mesothorace vittis quinque (una integra) strigisque duabus nigris; abdomine vittis quinque macularibus fuscis; operculis abdomine paullo brevioribus.

*Fem.* Prothorace punctis duobus nigris; mesothorace vittis exterioribus interruptis; abdomine fascia subapicali alba.

Head with a transverse undulating black line, which is dilated in the middle, and includes the ocelli; a black line on the hind border, interrupted on each side; face with a short longitudinal black line, and with transverse black streaks along each side. Prothorax with two black lines, which diverge from each other, and are dilated towards the fore border and towards the hind border; a black pyriform mark on each side in the disk; two black oblique lateral stripes; sutures black. Mesothorax with five black stripes, middle stripe entire; inner pair widely interrupted towards the hind border; outer pair slightly abbreviated near the hind border; two short black streaks proceeding from the fore border between the two inner and the two outer stripes. Abdomen with shining cinereous tomentum, and with five stripes of brown spots; these stripes do not extend to the

tip, and the middle one is very narrow. Dorsal opercula semielliptical; ventral opercula extending to three-fourths of the length of the abdomen. Tibiæ with a blackish band near the tip; fore tarsi blackish.

*Female.* Prothorax with a black point on each side in the disk. Mesothorax with the outer pair of stripes interrupted near the fore border. Abdomen with a white subapical band. Length of the body 11-13 lines, of the wings 38-40 lines.

*Var. γ. Fam.* Capite lineis duabus transversis, strigis lateralibus transversis lineaque faciei nigris; prothorace lineis duabus obliquis, vittis duabus guttisque duabus nigris, guttis duabus piceis; mesothorace vittis quinque (una integra) guttisque duabus nigris; abdomine maculis dorsalibus trigonis nigris fascisque interruptis piceis; alis anticis maculis quatuor apud venas transversas guttisque submarginalibus nigricantibus elongatis.

*Female.* Head with a transverse undulating black line, which is dilated in the middle and includes the ocelli; an irregular transverse black line on the front; face with a middle black line, which is abbreviated towards the front, and with black transverse streaks along each side. Prothorax with two black lines, which diverge from each other and are dilated towards the fore border and towards the hind border; a piceous dot on each side in the disk; a black dot on each side near the hind border; a black stripe on each side, widening towards the hind border. Mesothorax with five black stripes: middle stripe entire, wider towards its hind end; inner pair composed of a line and a spot, the line bent inward at its hind end; outer pair nearly interrupted in front, slightly dilated towards the hind end, which does not extend to the hind border; a slender black dot on the fore border between the inner pair and the outer. Abdomen with a piceous band on the fore border of each segment, each band interrupted in the middle, where there is a triangular black spot; underside with a piceous disk. Tarsi with a black band. Length of the body 12 lines, of the wings 40 lines.

*Hab.* Aru; Batchian; Ceram; Gilolo; Ternate.

Much allied to *D. bicaudata*, from which it may be distinguished by the black spot on the base of the abdomen.

16. *DUNDUBIA JUNCTIVITTA.* *Mas.* Testacea; capite linea transversa lata, linea anteriore transversa angulata, strigis transversis lateralibus lineaque faciei nigris; prothorace lineis duabus obliquis nigris, lunulis duabus vittisque duabus piceis; mesothorace nigro, vittis duabus testaceis nigro unimaculatis, postice testacco nigrobinotato; abdomine vittis quinque macularibus piceis; operculis abdominis bis triente non brevioribus; alis anticis guttis duabus apud venas transversas guttisque septem submarginalibus nigricantibus elongatis.

*Male.* Testaceous. Head with a broad transverse black line, which is broadest about the ocelli; a black angular line on the front; face with a middle black line, which is abbreviated towards the front, and with black transverse streaks along each side. Prothorax with two black lines, which diverge from each other, and are dilated towards the fore border and towards the hind border; a piceous lunule on each side in the disk; a piceous stripe on each side; sutures mostly black. Mesothorax black; two testaceous stripes, each of which is narrow and lanceolate in front, and contains a black spot near its hind end; hind part testaceous, with a black mark on each side. Abdomen with shining cinereous tomentum, and with five lines of piceous spots; middle spot at the base black, large, lanceolate. Ventral opercula about two-thirds the length of the abdomen. Tibiæ piceous towards the tips; tarsi piceous. Wings pellucid; veins ochraceous, partly black; an elongated blackish dot on the first transverse vein, and another on the second; a very small elongated blackish dot on each of the seven marginal veins. Length of the body 12 lines, of the wings 40 lines.

*Hab.* Ternate.

It resembles *D. subapicalis* in the spot on the base of the abdomen; but the markings of the mesothorax are very different.

17. *DUNDUBIA PICTA.* *Fam.* Ferruginea; capite apud oculos nigricante, vittis tribus viridibus, facie picea strigis fulvis transversis lateralibus; prothorace vittis tribus viridibus, vitta media latissima, vittas duas nigras includente; mesothorace guttis duabus nigricantibus, strigis duabus plagisque duabus viridibus; abdomine vittis quatuor piceis; operculis viridibus; alis anticis striga obliqua angulosa, guttis quatuor mediis guttisque submarginalibus fuscis, costa viridi.

*Female.* Ferruginous. Head blackish about the eyes; two irregular green stripes; a green stripe in front, interrupted on the face, which is piceous and has transverse tawny streaks along each side. Prothorax with a very broad green stripe, which is contracted in the middle, and contains two black stripes; these stripes are contracted near the fore border and near the hind border, where they are much dilated; an oblique irregular green stripe on each side; postscutellum green. Mesothorax with a blackish dot on each side on the fore border, between two green streaks; two green patches on the hind border. Abdomen with four piceous stripes, of which the inner pair are very broad. Ventral opercula green. Legs green; fore femora and posterior tibiæ with piceous bands; middle femora striped with piceous; posterior tibiæ piceous at each end; anterior tarsi piceous. Wings pellucid; a zigzag oblique dark-brown streak, which includes the first, second, and third transverse veins; fourth and fifth transverse veins clouded with dark brown, as are also the veins at



the base of the sixth marginal areolet; a dark-brown dot on each side of the third discoidal areolet; an elongated brown dot on each of the marginal veins; veins black, with pale-green bands; costa pale green. Length of the body 17 lines, of the wings 40 lines.

*Hab.* Sumatra.

Nearly allied to *D. psecas*, but the prothorax has a broader border.

18. *DUNDUBIA SIGNIFICATA*. *Mas.* Testacea; capite punctis duobus frontis vittaque faciei nigris; prothorace vittis septem nigris latiusculis; mesothorace vittis sex piceis, latis, ex parte connexis; abdomine piceo, segmentis albido marginatis, subtus albido, maculis dorsalibus magnis piceis; operculis abdominis triente paullo longioribus; alis innotatis, nigro venosis.

*Male.* Testaceous. Head black about the ocelli; a black point on each side in front; face with a black stripe. Prothorax with seven rather broad black stripes; middle stripe emitting a branch on each side along the suture; third pair of stripes marginal. Mesothorax with six broad piceous stripes, which are partly connected with each other. Abdomen piceous; hind borders of the segments whitish; underside whitish, with a large triangular piceous spot on each segment. Ventral opercula a little more than one-third of the length of the abdomen. Wings pellucid, without any markings; veins black. Length of the body 9 lines, of the wings 23 lines.

*Hab.* Morty; Batchian.

Closely allied to *D. Carmente*; but the markings of the thorax are very different.

#### Gen. *FIDICINA*, *Amyot et Serv.*

19. *FIDICINA TIMORICA*. *Mas.* Fulva, lata; capite plagis duabus nigris; facie nigra, fulvo strigata, antice picea; prothorace plagis duabus nigricantibus magnis trigonis; abdomine nigricante, subtus fulvo, fascia basali alba lata interrupta; operculis abdominis dimidio valde longioribus, apices versus lanecolatis; alarum anticarum venis transversis, 1<sup>a</sup> et 2<sup>a</sup> fusco nebulosis.

*Male.* Tawny, broad. Head black about the eyes; a black patch on each side; face piceous, black above, with a fusiform tawny streak. Prothorax with a large triangular blackish patch on each side between the sutures; postscutellum bright tawny, with a short black band on its fore border, and with a black spot on each side. Abdomen blackish, tawny beneath; a broad interrupted white band at the base; ventral opercula very much more than half the length of the abdomen, lanceolate towards their tips, which are bristly. Legs stout, short; femora striped with piceous; fore femora with two

stout spines. Wings pellucid; veins tawny, black towards the border; first and second transverse veins clouded with dark brown. Length of the body 18 lines, of the wings 56 lines.

*Hab.* Timor.

Is nearly allied to *F. (Cryptotympana, Stål) vicina*, Sign.; but the marks of the thorax and the colour of the wings sufficiently distinguish it.

20. *FIDICINA TONDANA*. *Fœm.* Viridis, crassa; capite margine maculisque posticis, fascia inter oculos valde excavata strigisque transversis frontalibus nigris, spatio intermedio fulvo longitudinaliter striato; prothorace antico margine vittisque tribus nigris, vittis lateralibus recurvis postice connexis, vitta media brevi, prothorace postico macula nigra trigona; mesothorace maculis quatuor nigris obconicis; abdominis dorso nigro; pedibus piceis, genibus viridibus; alis subcinereo-hyalinis, nigro venosis.

*Female.* Green, very stout. Head nearly as broad as the thorax; an irregular and much excavated black band between the eyes; some transverse black streaks on each side in front, the intermediate space tawny and longitudinally striated; some black dots near the hind border, which is also black. First segment of the prothorax mostly black-bordered, with a black stripe which does not extend to the hind border and is between two irregular black stripes; these are united on the hind border and are much recurved; hind segment with a black triangular spot, which rests on the fore border. Mesothorax with four large obconical black spots, which rest on the fore border, the outer pair much longer than the inner pair. Abdomen black above. Legs piceous; knees green; fore femora much incrassated. Wings hyaline, slightly cinereous; veins black. Length of the body 16 lines, of the wings 60 lines.

*Hab.* Tondano.

21. *FIDICINA CONFINIS*. *Fœm.* Testacea, viridi varia; capite strigis faciei viridibus transversis lateralibus; alarum venis testaceis, apud marginem exteriorem nigris, venis transversis, 1<sup>a</sup> et 2<sup>a</sup> nigricantibus.

*Female.* Testaceous. Head and thorax partly green. Head with transverse green streaks along each side of the face. Legs partly green; fore femora with two spines; tarsi piceous. Wings pellucid; veins testaceous, black along the exterior border; first and second transverse veins blackish. Length of the body 13 lines, of the wings 40 lines.

*Hab.* Penang.

#### Gen. *CICADA*, Linn.

22. *CICADA EXHAUSTA*, Guér. *Voy. Coquille Ins.* 181, pl. 10. f. 6.—*Hastipennis*, Walk. *Cat. Hom.* pt. v. 30.—*Conviva*, Stål.

*Hab.* Amboina; Aru; Batchian; Ceram; Morty; Mysol; New Guinea; Ké; Sula; Ternate.

23. *CICADA INNOTABILIS*. *Fam.* Testacea; facie lineis lateralibus nigris transversis; mesothorace piceo, vittis septem viridibus plus minusve abbreviatis; alarum venis nigris, basi fulvis costa fulva.

*Female.* Testaceous. Ocelli encircled with black. Face with transverse black lines along each side. Prothorax with the sutures of the segments mostly black. Mesothorax piceous, with seven green stripes; middle stripe and inner pair much abbreviated hindward; third pair abbreviated hindward. Fore tibiae with two stout acute spines. Wings pellucid; veins black, tawny towards the base; costa tawny. Length of the body 10 lines, of the wings 27 lines.

*Hab.* Morty.

24. *CICADA SUBNOTATA*. *Fam.* Testacea; capite nigro-tripunctato, facie nigro-vittata; prothorace lituris octo nigris lanceolatis; mesothorace guttis duabus nigris transversis; abdomine strigis lateralibus transversis fuscis; alis diaphanis, alis anticis rufo venosis, alis posticis nigro venosis.

*Female.* Testaceous. Head with a black point on each side between the eyes; face with a black stripe. Prothorax with four lanceolate black marks on each side of the sutures, the fourth or most exterior pair larger than the others. Mesothorax with a transverse black dot on each side near the hind border. Abdomen with a row of short transverse brown streaks on each side. Wings pellucid; costa and veins of the fore wings red; hind wings with black veins. Length of the body 11 lines, of the wings 27 lines.

*Hab.* Batchian.

25. *CICADA STIGMA*. *Fam.* Fusca, subtus testacea; prothorace suturis margineque postico sordide testaccis; mesothorace postico, testaceo; pedibus testaccis, fusco vittatis, femoribus anticis trispinosis; alis diaphanis, testaceo venosis, alis anticis striga costali fusca.

*Female.* Brown, testaceous beneath. Head dingy testaceous in front. Prothorax dingy testaceous about the sutures and about the hind border. Mesothorax testaceous about the hind border. Legs testaceous; femora and tibiae striped with brown; fore femora with three spines. Wings pellucid; veins testaceous; costa of the fore wings with a brown streak at rather beyond two-thirds of the length. Length of the body  $7\frac{1}{2}$  lines, of the wings 20 lines.

*Hab.* Gilolo.

The black costal stigma distinguishes this species from *C. exhausta*.

26. *CICADA QUADRIFIDA*. *Mas.* Testacea; capite thoracisque disco nigricante conspersis; abdomine vittis quatuor guttularibus, duabus

fuscis duabusque nigris; femoribus anticis trispinosis; alis diaphanis, testaceo venosis.

*Male.* Testaceous. Head and middle part of the thorax with a few minute blackish speckles. Abdomen with two nearly contiguous rows of excavated brown dots, and with a row of black dots on each side. Fore femora with three spines. Wings pellucid; costa and veins testaceous. Length of the body 8 lines, of the wings 22 lines.

*Hab.* Aru.

27. *CICADA PARALLELA.* *Mas.* Testacea; capite lituris apud oculos strigisque transversis frontalibus nigris; prothorace lituris lateralibus fuscis; mesothorace plagis duabus magnis fuscis testaceo variis; abdomine vittis quatuor fuscis macularibus; pedibus anticis fusco vittatis, femoribus anticis trispinosis; alis diaphanis, costa testacea, venis nigris basi fuscis.

*Male.* Testaceous. Head with some irregular black marks about the eyes, and with transverse black streaks on the front. Prothorax with several irregular brown marks on each side. Mesothorax with a large brown testaceous-varied patch on each side. Abdomen with four stripes of brown spots. Fore legs striped with brown; fore femora incrassated, with three large spines. Wings pellucid; costa testaceous; veins black, brown towards the base. Length of the body 9 lines, of the wings 23 lines.

*Hab.* Ceram.

#### Gen. PRASIA, *Stål*.

28. *PRASIA FATICINA*, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 574.

*Hab.* Celebes.

#### Gen. CEPHALOXYs, *Signoret*.

29. *CEPHALOXYs FULVA.* *Mus.* Fulva; capite longiconico, lineis duabus anticis piceis; thoracis segmentorum discis piceis; alarum venis nigris basi piceis, costa rufa.

*Male.* Tawny, paler beneath. Head elongate-conical, blackish about the ocelli, with a piceous line on each side in front. Disks of the segments of the prothorax and of the mesothorax piceous. Fore femora incrassated. Wings pellucid; veins black, piceous towards the base; costa red. Length of the body 9 lines, of the wings 22 lines.

*Hab.* New Guinea.

The front is much less acute than the front of *C. viridis*, *Sign.* (*C. rostrata*, *Cat. Hom.* i. 233), but is somewhat more acute than that of *C. nutans*.

Gen. MOGANNIA, *Amyot et Serv.*

30. MOGANNIA SESIOIDES. *Fam.* Rufescens, subtus viridis; antennis pallide testaceis, basi nigris; mesothorace pedibusque posterioribus viridibus; abdomine fasciis viridibus abbreviatis pellucidis; alis anticis basi subluridis, striga transversa fusca, costa rufa.

*Female.* Reddish, pale green beneath. Face porrect, lanceolate. Antennæ pale testaceous, black at the base. Mesothorax and posterior legs green. Abdomen red, with an abbreviated green band on the hind border of each segment. Fore legs red, incrassated. Wings pellucid; veins black, yellowish towards the base; fore wings long; costa red, a transverse brown streak at the base of the first and second discoidal areolets, a lurid tinge between the streak and the base of the wings. Length of the body 6 lines, of the wings 18 lines.

*Hab.* Sumatra.

Allied to *M. obliqua*; but the thorax has no black stripes, the colour of the abdomen is different, and the costa of the fore wing is much darker.

Gen. HUECHYS, *Amyot et Serv.*

31. HUECHYS SANGUINEA, see vol. i. p. 84.

*Hab.* Timor. Inhabits also China, Malacca, and Java.

*Var.* Fore part of the head and sides of the mesothorax pale luteous. Fore wings brown.

*Hab.* Sumatra.

32. H. CUPREA. *Fam.* Nigra; fronte fulvo unimaculata; prothorace vitta antica dilatata, lateribus margineque postico pallide luteis; mesothorace et metathorace luteis, hoc nigro-uniguttato, illo maculis duabus nigris obconicis maximis, pectore ex parte abdomineque luteis; femoribus rufis nigro vittatis; alis anticis cupreis, basi viridibus, costa pallida lutea, alis posticis nigricanti-cinereis.

*Female.* Black. Head with a tawny spot on the front. Antennæ tawny. Prothorax with the sides and the hind border pale luteous, and with a pale luteous stripe which is dilated on the fore border. Mesothorax and metathorax luteous, the former with two black obconical very large spots, the latter with a black dot. Pectus partly luteous. Abdomen luteous. Coxæ and femora red, the former striped with black. Fore wings cupreous, metallic green towards the base; costa pale luteous for more than half the length from the base. Hind wings blackish cinereous; veins black. Length of the body 11 lines, of the wings 28 lines.

*Hab.* Tondano.

Gen. ACRILLA, *Stål.*

33. ACRILLA ADIPATA, *Stål, Trans. Ent. Soc. Lond.* 3rd ser. i. 575.

*Hab.* Mysol.



Fam. FULGORINA, *Burm.*Subfam. FULGORELLÆ, *Spinola.*Tribe FULGORITES, *Spinola.*Subtribe FULGUROIDES, *Spinola.*Gen. HOTINUS, *Amyot et Serv.*

34. HOTINUS PYRORHYNCHUS, *Donov. Ins. Ind. Hem.* pl. 7. fig. 1  
(Fulgora).

*Hab.* Sumatra. Inhabits also Nepaul.

Gen. PYROPS, *Amyot et Serv.*

35. PYROPS NOBILIS, *Westw. Trans. Linn. Soc.* xviii. 146. 22, pl. 12.  
f. 10. (Fulgora.)

*Hab.* Sumatra. Inhabits also Malacca.

Subtribe LYSTROIDES, *Spinola.*Gen. APIÆNA, *Guérin.*

36. APIÆNA DISCOLOR, *Guérin, Voy. Bélanger, Zool.* 452, pl. 3. f. 2.  
—Blattoides, *Cat. Hom.* v. 46.

*Hab.* Sumatra. Inhabits also Java and Cochinchina.

37. APIÆNA ATOMARIA, *Burm. Hand. Ent.* ii. 1. 167. 3.

*Hab.* Sumatra. Inhabits also Hindustan and Java.

38. APIÆNA SCUTELLARIS, *White, Nat. Hist.* xvii. 330, var. *Mas.*  
Viridescens-picea; capite angusto, facie longa punctata tricarinata;  
prothorace carinato; mesothoracis scutello cervino; abdominis seg-  
mentis viridi marginatis; pedibus nigris; alis anticis rufescentibus,  
nigricante guttatis, apices versus cervinis, plagis punctisque palli-  
dioribus; alis posticis saturate rufis, albo guttatis, postice luridis,  
apices versus fuscis.

*Male.* Greenish piceous. Head very much narrower than the thorax;  
upper surface arched, with a rim and with a distinct longitudinal  
ridge; face long, flat, minutely punctured, with three extremely  
slight ridges, of which the lateral pair converge towards the mouth.  
Prothorax with a strong longitudinal ridge. Scutellum of the meso-  
thorax fawn-colour. Hind borders of the abdominal segments green.  
Legs black, broad, grooved; hind tibiæ with stout spines. Fore  
wings reddish for more than half the length from the base; reti-  
culated part fawn-colour, with some paler patches and points; a  
few blackish dots in the reddish part. Hind wings deep red, brown  
towards the tips, and with a broad lurid hind border; nine white

dots in the red part, which is partly blackish-bordered. Length of the body 9 lines, of the wings 27 lines.

*Hab.* Sumatra. Inhabits also Hindostan and Borneo.

39. *APHÆNA THETIS*, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 580.

Var., *A. Daphne*, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 581.—*A. Thetis*, var., *Stål*, *MS.*

*Hab.* Celebes, Tondano.

40. *APHÆNA SCRIPTIFACIES*. *Mas.* *Rufa*; fronte carinis tribus longitudinalibus unaque transversa arcuata; metathoracis lateribus basi luteis; pedibus nigris; alis anticis nigricantibus, fasciis duabus e lituris rufescentibus, apices versus rufescentibus, fascia subapicali albida arcuata; alis posticis fuscis, striga postica lutea, brevi lata, fascia alba antice submarginali, postice marginali.

*Male.* Dull red. Head very short, very much narrower than the thorax; front with a slightly arched transverse ridge, and with three longitudinal ridges, of which the lateral pair are oblique; face flat, with a rim on each side, and with two nearly parallel ridges. Prothorax with two punctures in the disk, forming an acute angle on each side, notched on each side in front for the reception of the eye. Metathorax luteous on each side at the base. Abdomen red. Legs black, stout, grooved; hind tibiæ with spines on the outer side. Fore wings blackish from the base to the reticulated part, reddish thence to the tips, with a semicircular whitish subapical band; two bands in the blackish part, composed of small red marks of various size and shape, most of them very incompletely annuliform; a reddish band near the base of the reticulated part. Hind wings brown, with a white band, which is submarginal about the tip, and marginal along the hind part of the exterior border; a short broad luteous streak along the basal part of the interior border; veins pale. Length of the body 10 lines, of the wings 34 lines.

*Hab.* Sumatra.

41. *APHÆNA BASIGERA*. *Mas.* *Cervina*; capite angusto, vertice arcuato tricarinato, fronte tricarinata; prothorace excavata; abdomine rufo, basi albo; pedibus nigris; alis anticis rufescentibus, fuscescente conspersis et bifasriatis, fusco marginatis, apices versus fuscescente nebulosis; alis posticis rufis cinereo venosis, margine postico basi albo, spatio exteriore fuscescente rufescenti-venoso.

*Male.* Fawn-colour. Head very much narrower than the thorax; upper surface arched, with a slight rim, and with three short longitudinal ridges; face flat, with a slight rim on each side, and with three parallel longitudinal ridges. Prothorax much excavated on each side in front. Abdomen bright red, white at the base. Legs black, grooved; hind tibiæ with stout spines. Fore wings reddish, brownish-

speckled, with two incomplete brownish bands; reticulated part incompletely clouded with brownish; exterior border wholly brown. Hind wings red, white along the basal part of the interior border, cinereous about the interior angle; veins cinereous; reticulated part brownish, with reddish veins. Length of the body  $7\frac{1}{2}$  lines, of the wings 21 lines.

*Hab.* Sumatra.

42. *APHÆNA NEÆRA*. *Mas.* Saturate viridis, vertice et prothorace carinatis; fronte longa, striata, bicarinata; abdominis segmentis tomento albo fasciatis; pedibus nigris; alis anticis nigro conspersis, fascia postmedia subarcuata pallide lutea, spatio exterioro fusco; alis posticis saturate rufis, albo nigroque guttatis, basi viridibus, postice fuscis, spatio apicali nigro cyaneo-guttato.

*Male.* Deep green. Head much narrower than the thorax; vertex more than twice as broad as long, with a longitudinal keel and with elevated borders, and with a spot of white tomentum on each side; front very much longer than broad, finely and longitudinally striated, with three very indistinct keels. Prothorax more than thrice as broad as long, with a prominent keel. Scutum with an acutely angular hind border. Abdomen with a band of white tomentum along the fore border of each segment. Legs black. Fore wings minutely black-speckled, with a postmedial slightly inward-curved pale luteous band; space beyond the band ferruginous brown, with very numerous veins, and with many transverse veinlets. Hind wings deep red, with a few white and black dots, irregularly deep green at the base, brown along the hind border; apical third part black, with a few pale blue dots. Length of the body 8 lines, of the wings 26 lines.

*Hab.* Menado, Celebes.

#### Gen. POLYDICTYA, *Guérin*.

43. *POLYDICTYA BASALIS*, *Guér. Icon. Règne Anim. Texte, Ins.* 358.

*Hab.* Sumatra. Inhabits also Silhet.

44. *POLYDICTYA COLLARIS*. *Mas.* Fulva; capite thorace angustiore, fascia nigra facie non carinata; prothorace unicarinato margine antico nigricante; mesothorace piceo, tricarinato, punctis duobus lateralibus albis; alis anticis piceis, fulvo reticulatis, fascia postmedia lurida; alis posticis lurido-cinereis, nigro reticulatis.

*Male.* Tawny. Head rather narrower than the breadth of the thorax; upper surface short, slightly excavated, with a black band on the front; face smooth, slightly convex, without any ridges. Prothorax blackish along the fore border, with a slight excavation on each side of the middle ridge. Mesothorax piceous, with three longitudinal ridges,

and with a white point on each side. Legs grooved, hardly stout; hind tibiae armed with spines. Fore wings piecons, wholly and minutely reticulated with tawny veins; an irregular lurid band at two-thirds of the length. Hind wings lurid cinereous, wholly reticulated, veins black. Length of the body 8 lines, of the wings 22 lines.

*Hab.* Morty.

Gen. CYRENE, *Westwood*.

45. CYRENE TELIFERA. *Mas et Fam.* Viridis; capite longissimo lanceolato, oblique ascendente, apice nigro, vertice quadricarinato, fronte tricarinata; prothorace unicarinato, pectore ventreque albidis; abdominis dorso ochraceo; alis anticis latis, tuberculatis, costa valde convexa, angulo postico acutissimo; alis posticis diaphanis, apud marginem posticum testaceo vittatis.

*Male and Female.* Green or testaceous. Head lanceolate, obliquely ascending, black at the tip, much longer than the thorax; vertex with four keels, the outer pair diverging from the inner pair and ending near the eyes; front with three keels, the keel on each side diverging towards the face from the middle one. Prothorax slightly arched, with one keel. Pectus whitish. Abdomen ochraceous, whitish beneath. Fore wings broad, minutely tuberculate; costa much rounded; interior angle very prominent and acute; transverse veins very numerous. Hind wings vitreous; veins testaceous; a testaceous stripe near the interior border; a few transverse veins. Length of the body 6-7 lines, of the wings 12-14 lines.

*Hab.* Arn; Ceram; Morty.

Gen. HARIOLA, *Stål*.

46. HARIOLA TIARATA, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 578.

*Hab.* Amboina.

Gen. ULASIA, *Stål*.

47. ULASIA SAUNDERSII, *Stål*, *Trans. Soc. Ent. Soc. Lond.* 3rd ser. i. 579.

*Hab.* Aru; Wagiau.

48. ULASIA MAGICA, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 579.

*Hab.* Mysol.

49. ULASIA REVERSA. *Mas.* Fusca; capitis cornu reflexo spatulato; fronte tricarinata, apicem versus dilatata; facie unicarinata; prothoracis lateribus tuberculatis; mesothorace quinquecarinato; alis anticis luridis, fusco guttatis et punctatis; alis posticis lurido-cinereis, hyalinis. *Var. β.* Corpore pedibusque fulvis, alis anticis fulvis basi viridescentibus.

*Male.* Brown. Head with prominent borders and with a spatulate horn which is reflexed nearly to the hind border of the prothorax;

front much widened towards the face, with three nearly parallel keels; face triangular, with one keel. Prothorax tuberculate on each side. Mesothorax with five slight keels. Legs long; hind tibiæ with five stout spines besides those at the tips. Wings with very numerous transverse veins. Fore wings lurid, with numerous darker dots and points. Hind wings lurid cinereous, hyaline; some of the marginal veins forked. *Var. β.* Body and legs tawny. Fore wings tawny, greenish towards the base. Length of the body 7 lines, of the wings 20 lines.

*Hab.* Aru; New Guinea.

The much more numerous transverse veins of the hind wings distinguish this species from *U. magica* and from *U. Saundersii*.

#### Gen. BIRDANTIS, Stål.

50. BIRDANTIS DECENS, Stål, *Trans. Ent. Soc. Lond.* 3rd. ser. i. 581.  
*Hab.* Aru.

#### Gen. ACARNA, Stål.

51. ACARNA ROSTRIFERA, Stål, *Trans. Ent. Soc. Lond.* 3rd ser. i. 584.  
*Hab.* Mysol.

52. ACARNA NOTATICOLLIS, Stål, *Trans. Ent. Soc. Lond.* 3rd ser. i. 584.  
*Hab.* Batchian.

53. ACARNA CONVIVA, Stål, *Trans. Ent. Soc. Lond.* 3rd ser. i. 585.  
*Hab.* Mysol.

54. ACARNA USTULATA, Stål, *Trans. Ent. Soc. Lond.* 3rd ser. i. 585.  
*Hab.* Aru.

55. ACARNA ORBA, Stål, *Trans. Ent. Soc. Lond.* 3rd ser. i. 585.  
*Hab.* Mysol.

56. ACARNA PUPILLATA, Stål, *Trans. Ent. Soc. Lond.* 3rd ser. i. 586.  
*Hab.* New Guinea.

#### Sect. N.

Corpus sat gracile. Caput marginibus subcarinatis; vertex sat longus; frons longa, tricarinata, lateribus anticis dilatatis et rectangulatis; facies tricarinata. Oculi prominentes. Prothorax et mesothorax tricarinati. Pedes graciles, longiusculi; tibiæ posticæ bispinosæ. Alæ angustæ, hyalinæ. Alæ anticæ apice rotundate, venis transversis paucis, venis marginalibus non furcatis.

Body rather slender. Head with slightly prominent borders; vertex longer than broad; front twice as long as broad, with the borders dilated and rectangular near the face, with three keels; face with three keels. Eyes prominent. Prothorax arched, with three keels,



the keel on each side diverging hindward from the middle one. Mesothorax with three keels; the keel on each side curved outward, diverging hindward from the middle. Legs slender, rather long; hind tibiæ with two spines besides those at the tips. Wings narrow, hyaline. Fore wings rounded at the tips; transverse veins mostly near the end of the hind border; stigma elongate, containing several oblique transverse veins; marginal veins not forked. Hind wings with two irregular lines of transverse veins.

57. *ACARNA SUBAPICALIS*. Testacea, capite rufo-fasciato; prothorace guttis duabus marginibusque lateralibus nigris; alis vitreis, testaceo venosis; alis anticis spatio apicali fusco, macula atra guttaque alba subapicalibus, stigmatum testaceo, venis transversis fusco nebulosis.

Testaceous. Head with a red band on the summit of the front. Prothorax with a black border on each side, and with a black dot on each side of the middle keel. Wings with testaceous veins. Fore wings with the space about the tips and along the adjoining part of the hind border brownish; a deep-black subapical spot, accompanied by a small white dot; stigma testaceous; most of the transverse veins clouded with brown. Length of the body 5(?) lines, of the wings 14 lines.

*Hab.* Morty.

#### Subtribe DICTYOPHOROIDES, *Spinola*.

##### Gen. DICTYOPHORA, *Germer*.

58. *DICTYOPHORA SURGENS*. *Mas et Fæm.* Ochracea; capite lanceolato subarcuato, sex-carinato, oblique ascendente, thorace vix brevior, viridi quadrivittato; prothorace viridi trivittato; mesothorace tricarinato viridi quinquevittato; pectore, abdomine pedibusque pallide viridibus, alis pellucidis, alis anticis lineis quinque et venis transversis, stigmatum viridi.

*Male and Female.* Ochraceous. Head lanceolate, slightly curved, obliquely ascending, almost as long as the thorax, with six keels and with four green stripes. Prothorax arched, with three green keels, the keel on each side oblique. Mesothorax with five green stripes, the three inner stripes with keels. Pectus, abdomen, and legs pale green. Legs long, slender; hind tibiæ with three minute spines besides those at the tip. Wings hyaline, colourless; veins black, green towards the base. Fore wings with five lines of transverse veins, of which the fifth is submarginal and more regular than the others; stigma green, with four oblique costal veins. Hind wings with a few irregular transverse veins. Length of the body 6 lines, of the wings 15 lines.

*Hab.* Amboina; Ceram; Flores; Sula.

It has much resemblance to *D. longipennis*, but the head is narrower in front.

59. *Dictyophora cribrata*. *Mas*. Viridis, gracilis, capite lanceolato longissimo quinquecarinato oblique ascendente fronte ochraceo bivittata, facie unnicarinata apice nigra, thorace ochraceo viridi-tricarinato, abdomine subtus nigro, pedibus longis nigro vittatis, alis cinereo hyalinis, alis anticis stigmatibus fusco venis fulvis apicem versus fuscis.

*Male*. Green, slender. Head lanceolate, obliquely ascending, very much longer than the thorax, with two keels above and with three beneath; two orange stripes on the front; face black towards the tip, with one keel and with prominent borders. Thorax orange, with three green keels. Prothorax arched. Abdomen beneath with a black disk. Legs long, slender; femora and tibiae striped with black. Wings narrow, cinereous, hyaline. Fore wings with a dark-brown stigma; veins tawny, brown beyond the middle; transverse veins irregular, rather numerous. Hind wings with an irregular line of transverse veins beyond the middle, and with a few transverse veins near the exterior border. Length of the body 5 lines, of the wings 9 lines,

*Hab.* Makian, Celebes.

The longer rostrum distinguishes it from *D. inscripta*, and the stigma of the fore wings from *D. concolor*.

#### Section *N*.

*Mas*. Corpus gracile. Caput ascendens, subattenuatum, sex-carinatum, corporis longitudine, apice subdilatatum; facies lateribus dilatatis. Antennae globosae. Thorax tricarinatus. Prothorax arcuatus. Pedes graciles; tibiae posticae trispinosae. Alae anticae angustae, apice rotundatae, lineis duabus e venis transversis, venis marginalibus furcatis. Alae posticae venis transversis paucis.

*Male*. Body slender. Head ascending, nearly as long as the body, with six keels, slightly decreasing in breadth from the base to half the length, slightly dilated at the tip; face dilated on each side. Antennae globose, very small. Thorax with three keels. Prothorax arched, produced over the base of the head. Abdomen with two oval vertical valves at the tip. Legs slender; posterior femora with two short spines, one beyond the middle, the other near the tip. Wings narrow, rounded at the tips. Fore wings with two lines of transverse veins; these lines approaching each other behind the stigma; the more exterior veins forked near the border; the forks of various length. Hind wings with a few transverse veins.

60. *Dictyophora nigrifinis*. *Mas et Fam*. Pallide viridis, capite carinis sex rufis apice nigro, prothorace et mesothorace rufo-carinatis,

abdomine pedibusque testaceis, alis pellucidis, alis anticis fusco submarginatis.

*Male and Female.* Pale green. Head with six red keels, black at the tip. Prothorax and mesothorax with red keels. Abdomen and legs testaceous. Wings limpid; veins black, testaceous towards the base. Fore wings brown along the exterior border and thence along half the length of the hind border. Length of the body  $6\frac{1}{2}$ –8 lines, of the wings 11–12 lines.

*Hab.* Kaisaa; Morty; Mysol; New Guinea; Waigiou.

### Subtribe CIXIOIDES.

#### Gen. CIXIUS, *Latr.*

61. *CIXIUS PERTURBATUS.* *Mas.* Piceus, subtus testaceus, capite perangusto, fronte facieque carina marginibusque fulvis, prothorace carinis tribus fulvis, mesothorace tricarinato maculis quatuor laterilibus testaceis, abdomine rufo apice piceo, pedibus testaceo fasciatis, alis anticis albido strigatis venis rufis venis transversis paucis venis marginalibus non furcatis, alis posticis obscure fuscis venis nigris.

*Male.* Piceous, testaceous beneath. Head very narrow; vertex arched; front with the face full four times as long as broad, lanceolate towards the mouth, with tawny prominent borders, and with a tawny keel. Prothorax arched, partly covering the vertex, with three tawny keels, the keel on each side oblique. Mesothorax with two testaceous spots on each side, and with three keels. Abdomen bright red, except towards the tip. Legs with testaceous bands. Fore wings with some tubercles in the disk and with numerous little whitish transverse streaks; veins mostly red; transverse veins few, most of them forming an irregular line near the exterior border; a few irregular transverse veins on the costal space beyond the middle; marginal veins not forked. Hind wings dark brown; veins black; an incomplete line of transverse veins; marginal veins not forked. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* Mysol.

Very distinct from *C. pustulatus*, to which it has most affinity.

62. *CIXIUS INFICITUS.* *Mas.* Fulvus, capite subgaleato oblique ascendente, vertice longo, fronte fusiformi unicarinata, facie unicarinata, mesothorace tricarinato, pedibus longiusculis, alis cinereo hyalinis; alis anticis stigmatate vittaque costali fuscis, lineis duabus e venis transversis, venis marginalibus duabus furcatis.

*Male.* Tawny. Head obliquely ascending, somewhat helmet-shaped, with prominent borders; vertex about four times as long as broad; front fusiform, much attenuated at each end, with one complete keel;

face with one keel. Prothorax arched, very short. Mesothorax with three keels, the keel on each side slightly angular in the middle. Legs slender, rather long. Wings cinereous, hyaline. Fore wings with a brown stigma, which is connected with an exterior brown costal stripe; two lines of transverse veins, first line very incomplete, second entire; two forked marginal veins. Hind wings with one line of transverse veins, and with two forked marginal veins. Length of the body  $2\frac{1}{2}$  lines; of the wings 7 lines.

*Hab.* Mysol.

63. *CIXIUS FERRUGINEUS*. *Mas.* Ferrugineus, capite compresso unicarinato, prothorace unicarinato, mesothorace tricarinato, pectore pedibusque albidis, abdomine nigricante subtus albido lateribus rufis, alis anticis albidis strigulosis rufo venosis, alis posticis nigricantibus.

*Male.* Ferruginous. Head compressed, with prominent borders, and with one keel; front with parallel sides, about thrice as long as broad. Prothorax arched, with one keel. Mesothorax with three keels. Pectus and legs whitish. Abdomen blackish, red along each side, whitish beneath. Fore wings with numerous very minute whitish streaks; veins reddish; one line of transverse veins; marginal veins not forked; costal transverse veins few, irregular, mostly forked. Hind wings blackish. Length of the body  $2\frac{1}{2}$  lines, of the wings 7 lines.

*Hab.* New Guinea.

64. *CIXIUS LURIDUS*. *Mas.* Fulvus, fronte et prothorace unicarinatis, mesothorace tricarinato, pedibus pallide testaceis, alis anticis strigulis plurimis transversis albidis guttis paucis nigris spatio marginali cinereo, alis posticis fuscis venis marginalibus non furcatis.

*Male.* Tawny. Head with slightly prominent borders; vertex arched, more than twice as broad as long; front about four times as long as broad, with parallel sides, and with one keel. Prothorax arched, with one keel and with slightly prominent borders. Mesothorax with three keels, the keel on each side undulating. Legs pale testaceous. Fore wings with numerous minute transverse whitish marks, a few black dots of various sizes on the disk; space along the exterior border mostly cinereous; two lines of transverse veins, first very incomplete, second submarginal, complete; one forked marginal vein near the tip. Hind wings brown, one incomplete line of transverse veins; marginal veins not forked. Length of the body  $2\frac{1}{2}$  lines, of the wings 6 lines.

*Hab.* Mysol.

65. *CIXIUS SIGNIFER*. *Mas.* Fulvus, gracilis, capite carinato, vertice brevi, mesothorace carinis tribus pallidioribus carinis lateralibus subundulatis, pedibus fusco fasciatis, alis cinereis; alis anticis apices

versus fuscis, plaga costali cinerea, strigula costali transversa punctisque marginalibus albidis, venis pallidis nigricante punctatis.

*Male.* Tawny, slender. Head with paler slightly prominent borders and with a paler keel; vertex twice as broad as long, dilated hindwards on each side; front rounded on each side, widest near the face, where it is broader than long. Prothorax arched, very short. Mesothorax with three paler keels, the keel on each side slightly undulating. Legs short, slender, with brown bands. Wings cinereous. Fore wings brown beyond the middle, except a cinereous patch on the costa, a little transverse whitish streak on the costa connected with the line of transverse veins, and a row of whitish points along the apical border; veins pale, with numerous blackish points. Length of the body  $1\frac{1}{4}$  line, of the wings 4 lines.

*Hab.* Morty.

#### Section N.

*Mas.* Corpus sat gracile. Caput thorace angustius; vertex tricarinatus; frons fusiformis, carina antice furcata; facies unicarinata. Antennæ brevissimæ. Prothorax arcuatus, brevissimus. Mesothorax quinque-carinatus. Alæ angustæ, hyalinæ. Alæ antice apice rotundatæ, venis transversis paucis, venis marginalibus non furcatis.

*Male.* Body rather slender. Head somewhat narrower than the thorax, with slightly prominent borders; vertex about twice as long as broad, narrower in front, notched on the hind border, with three keels, of which the middle one is short, and the other two converge towards the fore border; front fusiform, with one keel, which is forked near the front; face small, keeled. Eyes not prominent. Antennæ very short. Prothorax arched, very short, somewhat broader on each side, with slightly prominent borders. Mesothorax with five keels, the inner pair very slightly curved outwards, the outer pair diverging hindwards. Legs moderately long and stout. Wings narrow, hyaline. Fore wings rounded at the tips, with a few transverse veins in the disk near the tips; marginal veins not forked.

66. *CIXIUS REDUCTUS.* *Mas.* Fulvus, verticis carina media picea, mesothorace plagis duabus piccis, abdomine supra piceo segmentis testaceo marginatis, alis subcinereis; alis anticis testaceo venosis, venis transversis marginalibusque nigris.

*Male.* Tawny. Middle keel of the vertex piceous. Mesothorax with a piceous patch on each side. Abdomen piceous above; hind borders of the segments testaceous. Wings slightly cinereous. Fore wings with testaceous veins; transverse and marginal veins black. Length of the body 2 lines, of the wings 6 lines.

*Hab.* Mysol.

67. *CIXIUS CALIGINOSUS.* *Mas.* Testaceus, capite unicarinato, thorace



tricarinato; alis anticis piceis, apud costam rufescentibus, lineis duabus e venis transversis, venis costalibus transversis paucis; alis posticis nigricantibus.

*Male.* Testaceous. Head with elevated borders; vertex about four times as broad as long, with one keel; front four times as long as broad, with one keel and with parallel sides; face lanceolate, with one keel. Prothorax arched, with three keels, the keel on each side diverging hindward from the middle one. Mesothorax with three keels. Fore wings piceous, reddish along the costa, rounded at the tips; two lines of transverse veins, first line irregular, incomplete, second regular, complete, a few oblique transverse veins along the costa. Hind wings blackish. Length of the body 3 lines, of the wings 8 lines.

*Hab.* Mysol.

Gen. *BRIXIA*, *Stål.*

68. *BRIXIA TENEBROSA.* *Fæm.* Fulva, gracilis, capite subcompresso lateribus carinatis, vertice transverso, fronte facieque unicarinatis, mesothorace tricarinato, pedibus pallide flavescentibus, alis anticis æneo-fuscis puncto costali albido, alis posticis obscure cinereis.

*Female.* Tawny, slender. Head slightly compressed, with prominent borders; vertex a little broader than long; front with one keel, dilated and rounded on each side near the face, and there as broad as it is long; face with one keel. Prothorax arched, short. Mesothorax with three keels. Legs pale yellowish, short; slender. Fore wings æneous brown, with a whitish costal point beyond the middle; veins black; a few transverse veins. Hind wings dark cinereous. Length of the body  $1\frac{1}{2}$  line, of the wings  $4\frac{1}{2}$  lines.

*Hab.* Ceram.

69. *BRIXIA RUFULA.* *Fæm.* Rufescens, gracilis, capite subcompresso lateribus carinatis, vertice transverso, fronte facieque unicarinatis, mesothorace tricarinato, pedibus pallide flavescentibus, alis fuscis; alis anticis venis tuberculatis, lineis duabus e venis transversis.

*Female.* Reddish, slender. Head slightly compressed, with prominent borders; vertex twice as broad as long; front with one keel, widening from the vertex to the face, where it is a little broader than long; face with one keel. Prothorax arched, very short. Mesothorax with three keels. Legs pale yellowish, short, slender. Wings brown; veins black. Fore wings with minutely tuberculate veins; two lines of transverse veins, second irregular. Length of the body  $1\frac{1}{2}$  line, of the wings  $4\frac{1}{2}$  lines.

*Hab.* New Guinea.

70. *BRIXIA PALLICEPS.* *Fæm.* Nigricans, gracilis, capite lateribus carinatis, vertice transverso, fronte facieque albido-flavis unicarinatis,

mesothorace carinis tribus albedo-flavis, pectore pedibusque albedo-flavis, alis nigricantibus, alis anticis puncto costali postmedio sordide albedo.

*Female.* Blackish, slender. Head with prominent borders; vertex much broader than long; front with one keel, whitish yellow, except near the vertex, widening from the vertex to near the face, where it is rounded on each side, and much broader than long; face whitish yellow, with one keel. Prothorax arched, very short. Mesothorax with three whitish-yellow keels. Pectus and legs whitish yellow; veins black. Fore wings blackish, with a dingy-whitish costal point beyond the middle; two lines of transverse veins, the second more complete and regular than the first. Length of the body  $1\frac{1}{2}$  line, of the wings  $4\frac{1}{2}$  lines.

*Hab.* Mysol; New Guinea.

71. *BRIXIA ATRATULA.* *Fam.* Nigra, gracilis, capite minimo, vertice fronteque angustis, scuto tricarinato, pedibus albis, alis angustis subhyalinis, alis anticis punctis duobus costalibus albidis.

*Female.* Black, slender. Head very small, with very prominent borders; vertex and front narrow. Scutum with three keels. Legs white. Wings narrow, slightly hyaline. Fore wings with two whitish costal points near the tip. Length of the body  $1\frac{1}{2}$  line, of the wings  $3\frac{1}{2}$  lines.

*Hab.* Morty.

72. *BRIXIA SUBLUCIDA.* *Mas.* Fusca, prothorace albedo antice fusco, pectore pedibusque albedo-flavis, abdomine fulvo fascia subapicali picea; alis anticis triente apicali pallide cinereis, striga subcostali fusca, venis fusco nebulosis, costa sordide albida; alis posticis apice pallide cinereis.

*Male.* Brown, slender. Head compressed, with prominent borders; vertex longer than broad; front twice or four times as long as broad, widening much near the face, which has one keel. Prothorax whitish, except the fore part. Mesothorax with three keels, the keel on each side diverging hindwards from the middle one. Pectus and legs whitish yellow. Abdomen tawny, with a piceous band near the tip. Fore wings with a line of transverse veins near the tips, brown for two-thirds of their length, pale cinereous thence to the tips, and with a brown subcostal streak and brown clouded veins; costa dingy whitish. Hind wings brown, pale cinereous towards the tips. Length of the body 2 lines, of the wings 4 lines.

*Hab.* New Guinea.

73. *BRIXIA MARGINATA.* Fulva, gracilis, capite lateribus carinatis vertice transverso fronte facieque unicarinatis, mesothorace tricarinato, pedibus flavescens, alis luridis fulvo venosis; alis anticis nigricante ex parte marginatis, venis tuberculatis, lineis duabus e venis transversis.

Tawny, slender. Head with prominent borders; vertex twice as broad as long; front with one keel, widening from the vertex to the face, where it is rounded on each side, and much broader than long; face with one keel. Prothorax arched, very short. Mesothorax with three keels. Legs yellowish. Wings lurid; veins tawny. Fore wings blackish-bordered; costa for rather more than half the length from the base not bordered; veins minutely tuberculate; two lines of transverse veins, the second irregular. Length of the body  $1\frac{1}{2}$  line, of the wings  $4\frac{1}{2}$  lines.

*Hab.* New Guinea.

74. *BRIXIA VARIA*. *Mas et Fæm.* Fusca, gracilis, capite pectore pedibusque pallide flavis, capite subcompresso marginibus carinatis, vertice luteo transverso, fronte facieque unicarinatis, mesothorace carinis tribus flavescens, alis cinereis nigro venosis; alis anticis guttis quatuor nigricantibus, linea 3<sup>a</sup> e venis transversis nigricante nebulosa, spatio exteriore fusco-nebuloso.

*Male and Female.* Brown, slender. Head, pectus, and legs pale yellow. Head slightly compressed, with prominent borders; vertex luteous, twice as broad as long; front with one keel, widening from the vertex to the front, where it is a little broader than long; face with one keel. Prothorax arched, very short. Mesothorax with three yellowish keels. Wings cinereous; veins black. Fore wings shaded with brown beyond the third line of transverse veins, which is irregular and clouded with blackish; three blackish dots on the disk before the middle, and one near the hind border beyond the middle; stigma blackish, elongated. Length of the body  $1\frac{1}{2}$  line, of the wings 4 lines.

*Hab.* Sula.

75. *BRIXIA VARIEGATA*. *Fæm.* Fusca, gracilis, capite subcompresso lateribus flavescens carinatis, vertice transverso, fronte facieque carina flavescens, mesothorace carinis tribus flavescens, pectore abdomineque fulvis, pedibus flavescens, alis pallide cinereis; alis anticis basi striga costali obliqua fasciisque duabus fuscis, puncto costali alido.

*Female.* Brown, slender. Head slightly compressed, with prominent yellowish borders; vertex twice as broad as long; front with a yellowish keel, increasing in breadth from the vertex to near the face, where it is rounded on each side, and is somewhat broader than long; face with a yellowish keel. Prothorax arched, very short. Mesothorax with three yellowish keels. Pectus and abdomen tawny. Legs yellowish. Wings pale cinereous. Fore wings brown at the base, with an oblique brown costal streak near the base, and with two brown bands, first band much excavated, very irregular, second irregular, pale brown near the exterior border, to which it extends;

veins whitish, except in the brown parts; two irregular lines of transverse veins; a whitish costal point beyond the middle. Hind wings with black veins. Length of the body  $1\frac{1}{2}$  line, of the wings 4 lines.  
*Hab.* Sula.

76. *BRIXIA BICOLOR*. *Mas.* Fulva, gracilis, capite subcompresso lateribus carinatis, fascia fusca, fronte facieque albidis unicarinatis, mesothorace carinis tribus albidis, pectore pedibusque albidis, alis pallide cinereis nigro venosis, alis anticis guttis quatuor costalibus guttaque postica nigricantibus.

*Male.* Tawny, slender. Head slightly compressed, with prominent borders; a brown band on the summit of the front; vertex twice as broad as long; front and face whitish, with one keel; front widening from the vertex to the face, where it is a little broader than long. Prothorax arched, very short. Mesothorax with three whitish keels. Pectus and legs whitish. Wings pale cinereous; veins black. Fore wings with four blackish costal dots on the veins between the tip and the stigma, which is also blackish; a blackish dot on the hind border near the base; two irregular lines of transverse veins. Length of the body  $1\frac{1}{2}$  line, of the wings 4 lines.

*Hab.* New Guinea.

77. *BRIXIA PUNCTICOSTA*. *Fam.* Fulva, capite lateribus carinatis, vertice transverso, fronte facieque unicarinatis, prothorace et mesothorace albido tricarinatis, abdomine fusco segmentis testaceo marginatis, pedibus testaceis, alis diaphanis nigro venosis; alis anticis guttis marginalibus nigris, stigmatibus luteo nigro-biguttato. *Var. β.* Capite thoraceque testaceis, abdomine basi apiceque testaceo.

*Female.* Tawny. Head with prominent borders; vertex broader than long; front and face with one keel; front increasing in breadth from the vertex to the face, where it is not longer than broad. Prothorax and mesothorax with three whitish keels. Prothorax arched, very short. Mesothorax with the lateral keels diverging from the fore border to two-thirds of the length, converging thence to the hind border, where they are united; middle keel abbreviated hindward. Abdomen brown; hind borders of the segments testaceous. Legs testaceous, short, slender. Wings pellucid; veins mostly black. Fore wings with a luteous stigma, which has a black dot at each end; veins beyond the stigma, and along the exterior border with a black dot on the tip of each; two black dots on the hind border; two lines of transverse veins. Length of the body  $1\frac{1}{2}$  line, of the wings 4 lines.

*Hab.* Morty.

*Var. β. Male.* Head and thorax testaceous. Abdomen testaceous at the base and at the tip.

*Hab.* Mysol.

78. *BRIXIA CONGRUA*. *Fæm.* Testacea, tibiis posticis bispinosis, alis pellucidis testaceo venosis.

*Female.* Testaceous. Head wanting. Thorax like that of *B. puncticosta* in structure. Legs moderately long; hind tibiæ with two spines besides those at the tips. Wings limpid; veins testaceous. Fore wings with the two lines of transverse veins more irregular than those of *B. puncticosta*. Length of the body  $1\frac{1}{2}$  line, of the wings 4 lines.

*Hab.* Mysol.

79. *BRIXIA GUTTATA*. *Fæm.* Fulva, capite compresso, fronte subfusiformi unicarinata, facie unicarinata, antennis fuscis, mesothorace tricarinato, pedibus longiusculis, alis albidis; alis anticis ferrugineo guttatis, venis dimidio basali nigricantibus.

*Female.* Tawny. Head very narrow, with very prominent borders; vertex arched, very short; front about four times as long as broad, somewhat fusiform, with a very slight keel; face with one keel, as long as the front. Antennæ brown, cylindrical, as long as the breadth of the front. Prothorax arched, very short. Mesothorax with three keels, the keel on each side hardly undulating. Legs rather long, and slender; femora keeled. Fore wings whitish, with many ferruginous dots, which are most prevalent towards the exterior border; veins mostly blackish from the base to half the length, elsewhere whitish; two incomplete lines of transverse veins; one forked marginal vein extending to the tip of the costa. Hind wings whitish, with very few veins. Length of the body 2 lines, of the wings 6 lines.

*Hab.* New Guinea; Sula.

80. *BRIXIA CONCINNULA*. *Fæm.* Fusca, sat gracilis, capite lateribus subcarinatis, vertice antice latiore, fronte facicque carinatis, thorace albido-marginato, prothorace brevissimo, mesothorace carinis tribus albidis, pectore, segmentorum abdominalium marginibus posticis pedibusque pallide flavescentibus, alis angustis albidis hyalinis, alis anticis guttis nonnullis fasciisque duabus obliquis fuscis, fascia 2<sup>a</sup> albidio guttata, alis posticis apice pallide fusciscentibus.

*Female.* Brown, rather slender. Head with slightly prominent borders; vertex longer than broad, increasing in breadth towards the front; front and face keeled; front rounded on each side, increasing in breadth from the vertex, not longer than broad. Thorax with whitish borders. Prothorax very short. Mesothorax with three whitish keels, the lateral keels converging hindwards. Pectus, legs, and hind borders of the abdominal segments pale yellowish. Wings narrow, whitish hyaline. Fore wings with several brown dots, and with two oblique brown bands, first band nearly in the middle, second extending to the apical border, where there is a row of small whitish dots; veins whitish, black towards the tip; a few transverse veins on the



inner side of the second band. Hind wings pale brownish at the tips; veins whitish. Length of the body 1 line, of the wings 2 lines.  
*Hab.* Sula.

81. *BRIXIA OPACA.* *Mas.* Fusca, capite lateribus subcarinatis, vertice pallide testaceo tricarinato nigro-sexguttato, fronte lateribus subangulatis lineis tribus transversis carinaque albidis fasciis duabus nigris fasciisque albida, facie albido carinata, prothorace tricarinato fusco-guttato, mesothorace carinis tribus testaceis, pectore et segmentorum abdominalium marginibus posticis testaceis, pedibus testaceis fusco fasciatis, alis anticis fuscis testaceo conspersis, alis posticis nigricantincinereis.

*Male.* Brown. Head with slightly prominent borders; vertex pale testaceous, a little longer than broad, with three keels, which are united on the fore border, and with three black dots on each side; front longer than broad, slightly angular on each side, with a whitish keel, with a broad black band next the vertex, with three transverse whitish lines, with a narrow black band and with a broader whitish band; face with a whitish keel. Prothorax testaceous, arched, with several small brown dots, and with three keels, the lateral keels converging in front. Mesothorax with three testaceous keels. Hind part of the pectus and hind borders of the abdominal segments testaceous. Legs testaceous, with brown bands. Fore wings brown, with very numerous testaceous speckles; veins towards the exterior border testaceous, with brown speckles; two lines of transverse veins. Hind wings blackish cinereous. Length of the body  $\frac{3}{4}$  line, wings 2 lines.

*Hab.* New Guinea.

82. *BRIXIA TERMINALIS.* Fusca, capite carinato, fronte testaceo binotata antice latiore, thorace testaceo-marginato, mesothorace carinis tribus testaceis antice connexis, pedibus testaceis fusco fasciatis, alis cinereo hyalinis; alis anticis punctis duobus mediis nigris, vitta costali fusca apud marginem dilatata ibique guttas marginales cinereo-hyalinas includente.

Brown. Head with prominent borders and with one keel; vertex a little longer than broad; front with a testaceous mark on each side, widening from the vertex nearly to the face, where it is almost as broad as long. Thorax with testaceous borders. Prothorax arched. Mesothorax with three testaceous keels, which are united on the hind border. Legs testaceous, with brown bands. Wings cinereous, hyaline; veins black. Fore wings with two black points on the disk, one beyond the other; a brown costal stripe, which widens along the exterior border; some cinereous hyaline marginal dots; two lines of transverse veins, the second much more complete than the first. Length of the body  $\frac{3}{4}$  line, of the wings 2 lines.

*Hab.* New Guinea.

In this specimen the prothorax is injured, and the abdomen is lost, and therefore the description is incomplete.

83. *BRIXIA NANULA*. *Fœm.* Fusca, capite fulvo lateribus carinatis, vertice elongato, fronte facieque unicarinatis, prothorace arcuato brevissimo, mesothorace tricarinato, pectore pedibusque testaceis, femoribus posticis fusciscentibus, alis subcinereo-hyalinis nigro venosis; alis anticis lituris duabus antemediis, lineis duabus transversis guttaque media fuscis, venis apice fusco-nebulosis, stigmatibus nigricante interrupto.

*Female.* Brown. Head tawny, with prominent borders; vertex longer than broad; front and face with one keel; front widening from the vertex nearly to the face, where it is not longer than broad. Prothorax arched, very short. Mesothorax with three keels. Pectus and legs testaceous; hind femora brownish. Wings hyaline, slightly cinereous; veins black. Fore wings with two brown marks near the base, and with two transverse brown lines; first line incomplete; a brown dot on the disk between the first line and the second, which joins an interrupted blackish stigma; tips of the veins clouded with brown; some transverse veins in the second brown line. Length of body  $\frac{3}{4}$  line, of the wings 2 lines.

*Hab.* New Guinea.

84. *BRIXIA NIVEA*. *Mas.* Nivea, capite antico antennis pectorisque lateribus anticis rufescentibus, capite minimo, fronte subcultriformi, mesothorace non carinato, pectore abdomine pedibusque pallide flavescenscentibus, alis semihyalinis sat angustis; alis anticis lineis duabus e venis transversis, venis costalibus transversis tribus, venis marginalibus non furcatis.

*Male.* Pure white. Head in front, antennæ, and each side of the pectus in front reddish. Head very small, with very prominent borders; vertex triangular; front extremely narrow, the edges nearly contiguous; face long, lanceolate. Antennæ short, cylindrical. Prothorax arched, very small, extending over part of the vertex. Mesothorax not keeled. Pectus, abdomen, and legs pale yellowish. Legs slender. Wings semihyaline, rather narrow, with few veins. Fore wings rounded at the tips, with two lines of transverse veins; second line submarginal; three transverse costal veins near the tip; marginal veins not forked. Length of the body 1 line, of the wings 5 lines.

*Hab.* Mysol.

85. *BRIXIA SUBPUNCTATA*. *Mas.* Fulva, capite flavescenscenti-marginato, vertice fusco postice flavescenscente, fronte guttis duabus nigricantibus, facie pectoreque nigricantibus, prothorace flavescenscente, mesothorace nigricanti-sexvittato, abdominis dorso nigro segmentis

flavescente marginatis, alis subcinereis; alis anticis apud apices sub-fuscescentibus, venis flavescentibus nigro punctatis.

*Male.* Tawny, slender. Head slightly ascending, with slightly prominent yellowish borders; vertex brown, rather longer than broad, yellowish near the prothorax, with three keels; the lateral keels converging and united to the middle one near the front; front elongate elliptical, with a blackish dot on each side, and with one keel, which is forked near the vertex; face and pectus blackish, the former with one keel. Prothorax yellowish. Mesothorax with five keels and with six blackish stripes. Abdomen above black; hind borders of the segments yellowish. Wings slightly cinereous. Fore wings with five transverse veins beyond the middle, and with five more near the apical border, where they are slightly brownish; veins yellowish, with black points; stigma yellowish, bordered with black on its hind side. Length of the body 2 lines, of the wings 7 lines.

*Hab.* Flores.

86. *BRIXIA PARVICEPS.* *Mas.* Pallide flavescent, capite nigro-bimaculato, antennis luteis, thorace fusco lateribus anticis pallide flavescentibus, abdomine supra fusco, alis fusciscentibus semihyalinis, alis anticis striga costali nigricante venis rufis, alis posticis venis nigricantibus.

*Male.* Pale yellowish, rather slender. Head very narrow, with prominent borders and with a black spot on each side of the vertex; sides of the vertex converging towards the front, which is extremely narrow and is much rounded; its sides diverge towards the face, which is long and lanceolate. Antennæ luteous. Thorax brown, pale yellowish on each side in front. Mesothorax with three slight keels. Abdomen brown above. Wings brownish, semihyaline. Fore wings with a blackish costal streak, which extends along rather more than half the length from the base; veins red; a few longitudinal veins, and two lines of transverse veins; first line irregular, incomplete; second submarginal; six costal veins towards the tip, and six marginal veins. Hind wings with blackish veins. Length of the body 2 lines, of the wings 6 lines.

*Hab.* Mysol.

87. *BRIXIA PICTIPENNIS.* *Mas.* Pallide flava, capite antico lateribus rufis, pectore lituris duabus rufescentibus; ventre ochraceo basi, apice nigro; alis anticis cinereo-hyalinis, basi pallide flavis nigro variis, alis posticis nigro-cinereis.

*Male.* Pale yellow, slender. Head much compressed, with prominent red borders, which form two edges in front; face lanceolate, with one keel. Mesothorax not keeled. Pectus with a reddish mark on each side. Abdomen beneath ochraceous, piceous at the base, black towards the tip. Wings long, very narrow. Fore wings hyaline and

cinereous, except towards the base, with four black stripes, which proceed from the base; the longest subcostal, and extending to half the length of the wing; veins pale yellow, partly yellow, partly red; two transverse veins. Hind wings blackish cinereous, with black veins; one transverse vein. Length of the body 2 lines, of the wings 6 lines.

*Hab.* Morty.

88. *BRIXIA INTERECTA*. *Mas.* Testacea, capite compresso, fronte facieque unicarينات, fronte antica facieque fulvis, mesothorace fulvo quinque-carinato, pedibus longiuseculis, tibiis posticis medio unispinosis, alis cinereo-hyalinis; alis anticis basi lineisque duabus e venis transversis nigricante nebulosis, striga costali postmedia nigricante, venis nigris.

*Male.* Testaceous. Head compressed; with very prominent borders, very much narrower than the thorax; vertex long, narrower towards its fore border; front fusiform, with a deep keel, tawny towards the face, which is also tawny and keeled. Mouth black at the tip, extending a little beyond the hind coxæ. Prothorax very short in the middle, sides dilated. Mesothorax tawny, with five keels, the two keels on each side curved outwards. Legs rather long; hind tibiæ furrowed, with a slight spine in the middle, and with stout apical spines. Wings cinereous, hyaline. Fore wings with a blackish tinge at the base and along the two irregular lines of transverse veins, of which the first is very incomplete; a blackish streak along the costa from the first transverse line to near the tip; veins black; one forked marginal vein a little in front of the tip. Hind wings with one incomplete line of transverse veins. Length of the body 3 lines, of the wings 9 lines.

*Hab.* New Guinea.

89. *BRIXIA HUMERALIS*. *Mas.* Fulva, prothoracis lateribus pectoreque antico albidis, pedibus testaceis, femoribus piceo fasciatis, alis cinereo-hyalinis; alis anticis fusco-pallido subnebulosis, striga basali fasciæque obliqua antemedia fuscis, venis testaceis fusco punctatis.

*Male.* Tawny, slender. Head much compressed, with very prominent borders; vertex very narrow; front twice or eight times as long as broad, widening from the vertex to the face, which has one keel. Prothorax on each side and fore part of the pectus whitish. Mesothorax with three keels. Legs testaceous, without spines; femora with a piceous band. Wings cinereous-hyaline. Fore wings slightly clouded with pale brown; a brown streak proceeding from the base, and an oblique brown band before the middle; veins testaceous, with brown points; an incomplete line of transverse veins; marginal veins mostly forked. Length of the body  $1\frac{1}{2}$  line, of the wings 5 lines.

*Hab.* New Guinea.

90. *BRIXIA TESTACEA*. *Mas.* Testacea, gracilis, capite compresso lateribus alte carinatis, fronte longa, antice gradatim latior, facie carinata; prothorace unicarinato; mesothorace tricarinato, alis angustis subhyalinis, alis anticis albidis testaceo venosis.

*Male.* Testaceous, slender. Head compressed, with very prominent borders; vertex longer than broad; front thrice or six times as long as broad, increasing in breadth from the vertex to the face, which is keeled. Prothorax arched, short, with one keel. Mesothorax with three keels. Legs slender; hind tibiæ without spines, except those at the tips. Wings narrow, nearly hyaline. Fore wings whitish; veins testaceous; one transverse vein a little before the middle; two beyond the middle; three nearer the exterior border. Length of the body 2 lines, of the wings 6 lines.

*Hab.* Mysol.

#### Gen. CATARA.

*Mas. Corpus* rubustum. Caput angustum, subascendens, unicarinatum; vertex arcuatus; frons faciem versus latior et rotundatus. Prothorax angustus, arcuatus, unicarinatus, verticem ex parte obtegens. Mesothorax tricarinatus. Pedes longiusculi. Alæ anticæ lineis duabus e venis transversis; linea 2<sup>a</sup> valde arcuata; venis marginalibus nonnullis furcatis.

*Male.* Body stout. Head slightly ascending, much narrower than the thorax, with prominent borders; vertex much arched, with a slight keel; front increasing in breadth from the vertex to near the face, where its sides are slightly rounded, three or six times as long as broad, with a strongly marked keel; face about half the length of the front, with strongly marked keel. Prothorax narrow, much arched, hiding part of the vertex, slightly forked behind, with one keel. Mesothorax with three keels. Legs rather long; hind tibiæ with two spines beyond the middle, and with several apical spines. Fore wings with two lines of transverse veins; second line much curved outward, joining the first line at each end; transverse costal veins numerous, regular; some of the marginal veins forked. Hind wings, with the veins, mostly forked; one transverse vein.

91. *CATARA SUBDIVISA*. *Mas.* Testacea, vertice carina albida, fronte fusca, punctis plurimis albidis, lateribus carinaque rufescentibus, facie apicem versus nigra, carina rufescente, mesothorace pallido quadriguttato nigroque quadripunctato, alis piceis, alis anticis fascia plagaque luridis, alis posticis basi luridis.

*Male.* Testaceous. Vertex with a whitish keel; front brown, with numerous whitish points, reddish along each side, and with a reddish keel; face black towards the tip, with a reddish keel. Mesothorax with two paler dots, and with two black points on each side. Fore wings piceous; a lurid band near the base, and a lurid middle patch;



veins of the first transverse line whitish. Hind wings piceous, lurid towards the base; veins black. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

*Hab.* Morty.

#### Gen. GOZARTA.

*Mas.* Corpus sat gracile. Caput compressum, galeatum, oblique ascendens; vertex lanceolatus, unicarinatus; frons angusta; facies unicarinata. Thorax tricarinatus. Abdomen breve. Pedes breves, robusti. Alæ anticæ acutæ, costa basi valde rotundata, venis transversis paucis, venis marginalibus non furcatis.

*Male.* Body rather slender. Head obliquely ascending, compressed, helmet-shaped; the sides of the front extending much beyond the sides of the vertex, which is lanceolate and has one keel; front with parallel projecting sides, about ten times as long as broad; face very narrow, with one keel. Prothorax and mesothorax with three keels, the former arched. Abdomen short. Legs short, stout. Fore wings acute; costa slightly convex, much rounded at the base; transverse veins few, irregular; costal transverse veins numerous, oblique, parallel; marginal veins not forked. Hind wings rounded at the tips, with one incomplete line of transverse veins; marginal veins not forked.

92. GOZARTA ZEBRA. *Mas.* Fulva, subtus pallide testacea, fronte strigis plurimis nigris, thoracis carinis pallide testaceis, pedibus nigro fasciatis, alis anticis punctis nonnullis guttis duabus mediis strigulis costalibus strigisque quatuor longioribus fuscis, alis posticis fuscescenticinereis.

*Male.* Tawny, pale testaceous beneath. Vertex, with the borders and the keel, pale testaceous; front with many black parallel streaks on each side. Prothorax and mesothorax with pale-testaceous keels. Pectus with six black stripes. Legs with many black bands. Fore wings with several brown points and two brown dots on the disk; several oblique parallel brown streaks along the costa; four longer oblique streaks extending from the exterior part of the costa, third and fourth curved. Hind wings brownish cinereous. Length of the body 2 lines, of the wings 8 lines.

*Hab.* Tidon.

#### Gen. ERRADA.

*Mas.* Corpus gracile. Caput compressum; vertex conicus, unicarinatus; frons longa, tricarinata, antice latescens; facies unicarinata, fronte vix brevior. Prothorax et mesothorax tricarinati. Pedes robusti, longiusculi. Alæ angustæ, venis paucis.

*Male.* Body slender. Head compressed, with prominent borders; vertex conical, with one keel; front long, conical, increasing in breadth from the vertex to the face, near which its sides are rounded, with

three keels, of which the keel on each side is abbreviated towards the face, and is very remote from the middle one; face almost as long as the front, with one keel. Prothorax large; its middle part lanceolate, with three keels, extending over part of the vertex. Mesothorax with three keels. Legs stout, rather long; hind tibiæ with five stout spines besides those at the tip. Wings narrow. Fore wings with a few longitudinal veins, and with a few transverse veins, the latter mostly near the tips; a row of regular costal transverse veins.

93. *ENADA FUNESTA*. *Mas.* Picea, capite supra prothoracisque disco testaceis, tarsis posticis apice tarsisque anterioribus testaceis, alis antictis fuscis albo parce punctatis, alis posticis nigricantibus.

*Male.* Piceous. Head above and middle part of the prothorax testaceous. Anterior tarsi, spines of the hind tibiæ, and tips of the hind tarsi testaceous. Fore wings brown, with a few white points in the disk; two larger white points on the costa, one beyond two-thirds of the length, the other near the tip. Hind wings blackish. Length of the body 3 lines, of the wings 7 lines.

*Hab.* Mysol.

#### Gen. BODECIA.

*Mas.* *Corpus* robustum. *Caput* compressum; frons longa, bicarinata, faciem versus latescens; facies non carinata. *Antennæ* brevissimæ. *Thorax* brevis. *Pedes* robusti. *Alæ* anticæ latæ, venis transversis paucis, costa subflexa.

*Male.* Body stout. Head compressed, with prominent borders; vertex longer than broad; front thrice or six times as long as broad, widening from the vertex nearly to the face, where it is contracted, with two keels, which are nearly parallel to the borders; face not keeled. Eyes large, prominent. *Antennæ* very short. Prothorax and mesothorax short, much attenuated on each side, the former slightly arched. Legs stout. Fore wings broad; transverse veins few, irregular, excepting some which form a complete submarginal line; transverse costal veins numerous, irregular; marginal veins forked; costa slightly bent in the middle. Hind wings with two transverse veins on the disk, the rest forming a submarginal line; marginal veins numerous, one of them forked.

94. *BODECIA VARIPES*. *Mas.* Picea, capite lateribus testaceo variis, fronte nigricante, abdomine testaceo fascia ventrali nigra, pedibus anterioribus nigricantibus, pedibus posticis testaceis; alis anticis punctis plurimis lituraque testaceis, venis fulvis; alis posticis nigricantincinereis, venis nigris.

*Male.* Piceous. Head partly testaceous on each side; front blackish.

Abdomen testaceous; a blackish middle band beneath. Anterior

legs bluish; knees and hind legs testaceous. Fore wings with tawny veins, with numerous testaceous points; a testaceous mark in the middle, chiefly on the veins. Hind wings blackish cinereous; veins black. Length of the body 3 lines, of the wings 7 lines.

*Hab.* Mysol.

Gen. INTERAMMA.

*Mas. Corpus gracillimum.* *Caput* valde compressum, oblique ascendens thorace longius, marginibus aciculatis; vertex lanceolatus; frons tenuissima; facies lanceolata, unicarinata. *Oculi* prominentes. *Antennæ* cylindricæ, furcatæ, capite vix breviores. *Thorax* brevis. *Abdomen* thorace duplo longius. *Pedes* breves, graciles. *Alæ* anticæ longæ, angustæ, venis paucis, areolis quatuor subapicalibus.

*Male.* Body slender. Head cultriform, or extremely compressed and dilated vertically, as long as the thorax, with two edges above and with one edge beneath. Eyes prominent. *Antennæ* cylindrical, more than half the length of the head, forked at the base; third joint very short. Prothorax short, arched. Mesothorax not keeled. Legs short, slender. Wings narrow. Fore wings with an irregular submarginal line of transverse veins.

95. INTERAMMA ASCENDENS. *Mas.* Albida, alis fere pellucidis, alis anticis guttis tribus fuscis.

*Male.* Whitish. Wings nearly vitreous. Fore wings with three brown dots on the disk, one antemedial, the others postmedial. Length of the body 2 lines, of the wings 8 lines.

*Hab.* Morty.

96. INTERAMMA ANGUSTA. *Mas.* Albido-testacea, capite rufo-bivittato, antennis rufis nonnunquam albidis, pectore rufo-bistrigato, alis pellucidis, venis albido-testaceis.

*Male.* Whitish testaceous, very slender. Head obliquely ascending, much compressed, longer than the thorax, with a red stripe on each side, and with very prominent borders; vertex lanceolate; front extremely narrow; face lanceolate, with one keel. Eyes prominent. *Antennæ* red, cylindrical, nearly as long as the head, forked and whitish at the base, sometimes wholly whitish; the two forks of equal length. Thorax short. Pectus with two red streaks. Abdomen about twice the length of the thorax. Legs short, slender. Wings long, narrow, vitreous, with a few whitish testaceous veins. Fore wings with four areolets on the disk near the tip, and with three transverse veins in front of the areolets. Length of the body 2 lines, of the wings 7 lines.

*Hab.* Mysol.

97. INTERAMMA DELICATA. *Fem.* Flavescenti-alba, glabra, nitens,

gracillima, capite valde compresso, lateribus alte carinatis vittis duabus rufis, antennis posticis cylindricis, prothorace lateribus carinatis, mesothorace bicarinato, pedibus gracillimis, alis longis angustis, alis anticis vitta undulata ochracea lituram nigram includente, alis posticis niveis.

*Female.* Yellowish white, smooth, shining, very slender. Head with prominent borders, much compressed, vertically dilated, forming a double edge in front; a red stripe on each side. Antennæ porrect, cylindrical, rather shorter than the head. Prothorax very short, with prominent borders. Mesothorax with two short keels, which converge from the fore border. Legs short, very slender, very minutely setulose. Wings long, narrow. Fore wings with an ochraceous undulating irregular stripe, which surrounds a black mark on the veins at nearly three-fourths of the length; veins pale yellowish; transverse veins few; of these, three are longer than the others, and two of the three are partly included in the black mark. Hind wings milk-white. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* New Guinea.

## Section 2.

*Fam.* Corpus sat gracile. Caput galeatum, brevè, valde compressum, oblique ascendens, vertex perangustus; frons et facies longæ, unicarinatae. Antennæ brevissimæ, obtusæ. Prothorax brevis, arcuatus; mesothorax tricarinatus. Alæ anticæ venis transversis paucis, venis marginalibus tribus furcatis. Alæ posticæ vena marginali una furcata.

*Female.* Body rather slender. Head short, obliquely ascending, much compressed, helmet-shaped; vertex very narrow; front with the face elongate-fusiform, with one keel, proboscis extending to the hind coxæ. Antennæ obtuse, very short. Prothorax short, arched. Mesothorax with three keels, the keel on each side diverging backward from the middle one. Legs moderately long. Fore wings with very few transverse veins; three forked marginal veins. Hind wings with one forked vein.

98. INTERAMMA SUBVARIA. Testacea, alis cinereis fere hyalinis venis fuscis; alis anticis strigis tribus obliquis, macula, fascia furcata fasciaque marginali fuscis, venis testaceo punctatis.

Testaceous. Wings cinereous, nearly hyaline; veins brown. Fore wings with numerous testaceous points on the veins; three brown oblique streaks proceeding from the costa near the base, the middle one very short and slender; an exterior brown costal spot; two more exterior brown bands, the first forked towards the costa, the second marginal. Length of the body 2 lines, of the wings 5 lines.

*Hab.* Mysol.

Gen. BIDIS. See Vol. I. p. 88.

99. BIDIS LITURIFRONS. *Fam.* Testacea, capite subascendente lituris

lateralibus nigris, vertice lanceolato, fronte bicarinata nigro guttata aut ramoso bivittata, facie uniearinata apice picea, antennis piceo bifasciatis, prothorace tricarinato, mesothorace quinquecarinato, abdomine ochraceo, pedibus longiusculis piceo fasciatis, alis subcinereo hyalinis; alis anticis angustis, lituris, punctis marginalibus strigaeque fuscis; alis posticis apice fuscis.

*Female.* Testaceous. Head obliquely ascending, with prominent borders and with some small black marks on each side; vertex lanceolate, with some small black marks; front widening towards the face, where it is more than four times as long as broad, with a black ramoso stripe, or with black dots along each side, and with two approximate keels; face long, piceous towards the tip, with one keel. Antennæ much longer than the thorax; first and second joints filiform; second much longer than the first, with two piceous bands; third setiform, shorter than the second. Prothorax much arched, with three keels. Mesothorax with five keels. Abdomen dull ochraceous; ovipositor black. Legs slender, rather long; femora with piceous tips; anterior tibiæ with piceous bands. Wings vitreous, slightly cinereous. Fore wings narrow, with brown points along the exterior part of the costa, and thence along the whole of the interior border; a few small brown marks before the middle, and a brown streak, which extends from the line of transverse veins to the tip; marginal veins forked. Hind wings tinged with brown about the tips; marginal veins simple. Length of the body 4 lines, of the wings 10 lines.

*Hab.* Aru; Gilolo; Ceram; Morty; Mysol; New Guinea.

100. *BIDIS PRIVATA.* *Mas.* Fulva, alis cinereo-hyalinis, alis anticis punctis marginalibus fuscis, alis posticis apice subfuscescentibus.

*Male.* Tawny, in structure like *B. liturifrons*. Wings cinereous, hyaline.

Fore wings with brown points round the tips and along the neighbouring part of the costa and of the hind border. Hind wings slightly tinged with brown about the tips. Length of the body 3 lines, of the wings 8 lines.

*Hab.* Mysol.

#### Gen. DELPHAX, *Fabr.*

101. *DELPHAX LONGICORNIS.* *Fæm.* Testacea, capite lateribus subcarinatis, vertice bicarinato, fronte longa nigra subcarinata lituris margineque antico testaceis, facie nigra carinata, antennis longis cylindricis, prothorace tricarinato, mesothorace quinquecarinato, pectore nigro fasciato, pedibus longis nigricante fasciatis, alis cinereis breviusculis, alis anticis piceo strigatis.

*Female.* Testaceous. Head with slightly prominent borders; vertex longer than broad, with two converging keels, which are united on the fore border; front black, slightly keeled, increasing in breadth



from the vertex, from twice to four times as long as broad, with testaceous marks along each side, wholly testaceous near the face, which is black and keeled. Antennæ cylindrical; first joint longer than the breadth of the front, second tawny, very much longer than the first; breadth very slender, very much longer than the second joint. Prothorax arched, with three keels, which are united on the fore border, mesothorax with five keels. Pectus with a broad black band. Ovipositor black. Legs long; anterior femora and tibiæ with blackish bands; hind femora blackish beneath; hind tibiæ with one spine, besides the four apical spines, one of which is very long. Wings cinereous, rather short. Fore wings with some small piceous streaks, which are mostly on the veins, the latter are testaceous; one line of transverse veins at three-fourths of the length. Hind wings with black veins. Length of the body  $2\frac{1}{2}$  lines, of the wings 4 lines.

*Hab.* Mysol.

102. *DELPHAX MEDIA*. *Mas.* Testacea, sat gracilis, capite angusto unicarinato, fronte facieque vittis duabus nigris interruptis, antennis thorace paullo longioribus arista longissima gracillima, prothorace unicarinato, mesothorace tricarinato; alis pellucidis sat angustis, venis fulvis; alis anticis striga costali transversa, plaga liturisque duabus apicalibus fuscis.

*Male.* Testaceous, rather slender. Head narrow, with very prominent borders and with one keel; vertex longer than broad; front and face with a black interrupted stripe on each side; more than twice as long as broad. Antennæ cylindrical, a little longer than the thorax; arista very long and slender. Prothorax with one keel, much arched, extending over the hind part of the vertex. Mesothorax with three keels. Legs rather short and slender. Wings pellucid, rather narrow; veins tawny. Fore wings, at two-thirds of the length, with a brown transverse costal streak, which joins a pale-brown hinder patch; two small brown apical marks; an irregular line of transverse veins between the streak and the patch; one forked marginal vein. Hind wings with two transverse veins and with one forked marginal vein. Length of the body 2 lines, of the wings 6 lines.

*Hab.* Mysol.

Tribe ISSITES, *Spinola*.

Subtribe ISSITES, *Spinola*.

Gen. ISSUS, *Fabr.*

103. *ISSUS HERBIDUS*. *Fæm.* Viridis, robustus, capite antico abdomine supra pedibusque rufescentibus, fronte producta bicarinata faciem versus latescente, facie non carinata, mesothorace brevi, pedibus validis,

alis anticis pallide luteis striga fusca, venis viridibus, venis transversis plurimis, alis posticis cinereis.

*Female.* Green, stout. Head in front, abdomen above, and legs reddish. Head compressed, with prominent borders; vertex longer than broad; front from thrice to six times as long as broad, increasing in breadth from the vertex to near the face, where it is rounded on each side, with two keels which are nearly parallel to the borders; face not keeled. Prothorax arched, much attenuated on each side. Mesothorax short. Legs stout. Fore wings pale luteous, shining, with a brown streak extending from near the base to the interior angle; veins green; transverse veins numerous, irregular; two forked marginal veins. Hind wings cinereous; veins brown; an interrupted submarginal line of transverse veins. Length of the body  $2\frac{1}{2}$  lines, of the wings 6 lines.

*Hab.* Mysol.

104. *ISSUS BIPLAGA.* *Mas.* Fulvus, robustus, capite compresso nigro-univittato, facie nigra, mesothorace bicarinato, pedibus validis sulcatis, alis cinereis semihyalinis; alis anticis fusco conspersis, fasciis duabus fuscis latis abbreviatis, venis transversis paucis, venis marginalibus non furcatis.

*Male.* Tawny, stout. Head compressed, with prominent borders; vertex and front with a black stripe; vertex longer than broad; face about four times as long as broad, slightly increasing in breadth from the vertex to the face, with two keels, which are nearly parallel to the borders; face black. Prothorax arched, much attenuated on each side. Mesothorax short, with two keels, which diverge from each other hindward. Legs stout; femora and tibiæ grooved. Wings cinereous, semihyaline. Fore wings brown-speckled, with two broad brown abbreviated bands, one antemedial, the other postmedial; transverse veins few and irregular, except those which form the submarginal line; transverse costal veins numerous, irregular; marginal veins not forked. Length of the body 3 lines, of the wings 7-8 lines.

*Hab.* Morty.

*Var. Fem.* Viridescens-testacea, verticis lateribus nigris, fronte rufo univittata, facie strigis duabus nigris clavatis, pectore nigro, abdomine subtus basi albido, tibiis anterioribus femoribusque piceis; alis anticis disco nigricante, fascia antemedia brevi albida.

*Female.* Greenish testaceous. Vertex with black borders. Front with a red stripe. Face with a black clavate streak on each side. Pectus mostly black. Abdomen beneath whitish at the base. Femora and anterior tibiæ mostly piceous. Fore wings mostly blackish in the disk; a whitish antemedial band, which is abbreviated at each end.

*Hab.* Arii.

105. *ISSUS PICEUS*. *Mas.* Piceus, capite compresso lateribus testaceis, lituris duabus nigris, vertice maculis duabus angulisque posticis testaceis, fronte nigra longissima testaceo tricarinata, facie nigra, thorace testaceo-consperso, genibus, tibiis posticis tarsisque posticis testaceis; alis anticis testaceo conspersis, striga antemedia nigra, venis fulvis.

*Male.* Piceous. Head compressed, with prominent borders, testaceous on each side, where there is an oblique black mark in front of the eye; vertex a little longer than broad, with a triangular testaceous spot on each side, and with prominent testaceous hind angles; front black, very long, rounded, and slightly widening towards the face, with three testaceous keels, of which the middle one is much shorter than the others; face black. Thorax with testaceous speckles. Knees, hind tibiae, and hind tarsi testaceous. Fore wings with testaceous speckles, and with a black antemedial streak in the disk; veins tawny. Length of the body 3 lines, of the wings 8 lines.

*Hab.* Aru.

Var. *β.* *Mas.* Fulvus, vertice gutta media nigra, fronte facieque nigris fulvo marginatis, prothorace piceo fulvo-punctato, mesothorace piceo fulvo-trivittato, femoribus piceis apice fulvis, alis anticis piceis fulvo venosis et tuberculatis plaga media longa nigra.

*Male.* Tawny. Vertex with a black spot in the middle; front black, with tawny borders and with three tawny keels; face black, tawny on each side, and with a tawny keel. Prothorax mostly piceous, with tawny points. Mesothorax piceous, with three tawny stripes. Femora piceous, with tawny tips. Fore wings piceous, with tawny veins and with numerous minute tawny tubercles; an elongated black patch in the middle. Length of the body 3 lines, of the wings 6 lines.

*Hab.* New Guinea.

106. *ISSUS DIMIDIATUS*. *Mas.* Piceus, crassus, fronte longa angusta bicarinata faciem versus rotundata, thorace non carinato, abdomine fulvo lineolis duabus lateralibus rufis, pedibus posticis fulvis; alis anticis latis, plaga, punctis plurimis venisque fulvis, costa rotundata; alis posticis nigro-cinereis.

*Male.* Piceous, stout. Head compressed; front with two keels, widening towards the face, where its breadth is about one-third of its length and about twice its breadth near the vertex. Thorax not keeled. Abdomen mostly tawny, with a red line on each side. Hind legs tawny. Fore wings broad, with a tawny patch in the disk, with tawny veins and with numerous tawny points; costa irregularly rounded; marginal veins not forked; costal transverse veins few, irregular. Hind wings blackish cinereous; veins black. Length of the body 3 lines, of the wings 7 lines.

*Hab.* Mysol.

107. *ISSUS BIFASCIA*. *Mas.* Testaceus, robustus, capite compresso

rufo marginato, fronte bicarinata nigro univittata, facie nigro univittata non carinata, prothorace lateribus fuscis, mesothorace triangularato, pedibus validis, tibiis tarsisque rufescentibus; alis anticis semihyalinis, strigis duabus basalibus fascisque duabus nigricantibus, venis transversis paucis; alis posticis cinereis hyalinis.

*Male.* Testaceous, stout, shining. Head compressed, with prominent red borders; vertex longer than broad; front from more than twice to four times as long as broad, widened and rounded near the face, with two keels which are nearly parallel to the borders, and with a black stripe, which is abbreviated near the vertex; face with a black stripe, not keeled. Prothorax slightly arched, brown, and much attenuated on each side. Mesothorax with three long acute angles. Legs stout; tibiæ and tarsi reddish, the former furrowed. Fore wings semihyaline, with two blackish streaks proceeding from the base, one costal, the other on the interior border, these streaks join an antemedial blackish band, the latter nearly connected on the hind border with a postmedial blackish band; transverse veins few and irregular, excepting those which form a submarginal line. Hind wings cinereous, hyaline; veins blackish; submarginal line of transverse veins irregular. Length of the body  $2\frac{1}{2}$  lines, of the wings 6 lines.

*Hab.* New Guinea.

#### Gen. HYSTEROPTERUM, *Amyot et Serv.*

108. HYSTEROPTERUM SODALE. *Mas.* Testaceum, capite vix compresso, fronte fusca tricarinata testaceo conspersa, facie unicarinata fusco conspersa, thorace fuscescente lateribus testaceo conspersis, femoribus tibiisque posticis fuscis; alis anticis strigis duabus basalibus latis, plaga subcostali fasciaque submarginali interrupta fuscis; alis posticis nigricanti-cinereis.

*Male.* Testaceous, shining. Head hardly compressed, with prominent borders; vertex broader than long; front brown, testaceous-speckled, about twice as long as broad, slightly widening from the vertex to the face, with three keels, which do not extend to the face, the keel on each side slightly curved outward; face brown-speckled, with one keel. Thorax brownish, with testaceous speckles on each side. Hind femora and hind tibiæ brown. Fore wings with two broad brown streaks proceeding from the base, one along the costa, the other along the hind border; a brown postmedial patch near the costa; a brown irregular interrupted submarginal band. Hind wings blackish cinereous. Length of the body 4 lines, of the wings 8 lines.

*Hab.* Sumatra.

Closely allied to *H. truncatum*; but the fore wings of the latter have no submarginal line.

109. *HYSTEROPTERUM TUMIDULUM*. *Fam.* Fulvum, subtus testaceum, capitis lateribus nigro variis, fronte tricarinata, facie testaceo varia guttis tribus pallide testaceis, mesothorace parvo, pedibus nigro guttatis; alis anticis coriaceis, ferrugineo conspersis, venis piceis; alis posticis fuscis.

*Female.* Tawny, testaceous beneath. Head with very prominent borders; sides varied with black; vertex concave, a little broader than long; front very much longer than broad, widening and rounded towards the face, with three keels, the keel on each side curved; face varied with testaceous, adorned with three pale-testaceous dots in a transverse line at its base. Prothorax much arched. Mesothorax small. Legs spotted with black. Fore wings coriaceous, speckled with ferruginous; veins piceous: four lines of transverse veins; first, second, and third lines irregular; fourth regular, very near the exterior border. Hind wings brown, with one irregular line of transverse veins. Length of the body 4 lines, of the wings 10 lines.

*Hab.* Ceram.

110. *HYSTEROPTERUM LÆVE*. *Fam.* Fulvum, validum, capite compresso lateribus carinatis, vertice conico, fronte nigra fulvo fasciata lateribus angulatis, facie picea fulvo conspersa, pedibus piceo fasciatis, alis anticis piceo venosis et subconsersis, alis posticis nigricantibus.

*Female.* Tawny, stout. Head compressed, with the borders very prominent on each side of the vertex, which is conical and somewhat longer than broad; front black, with an irregular tawny band, rather longer than broad, dilated and angular on each side towards the face; face piceous, mottled with tawny. Prothorax arched. Mesothorax small. Legs stout, with piceous bands. Fore wings shining, slightly mottled with piceous; veins piceous; transverse veins few. Hind wings blackish; veins black. Length of the body  $4\frac{1}{2}$  lines, of the wings 11 lines.

*Hab.* Ceram.

111. *HYSTEROPTERUM MOROSUM*. *Fam.* Testaceum, fusco conspersum, capite angusto, fronte longa tricarinata transverse rugosa, mesothorace non carinato; alis anticis pallide viridibus rufescente conspersis, lituris lutescentibus, guttis marginalibus nigricantibus, venis rufescentibus; alis posticis luridis, venis fuscis, venis marginalibus non furcatis.

*Female.* Testaceous, brown-speckled. Head narrow, with very prominent borders; vertex much longer than broad; front long, rounded and very much broader towards the face, with transverse ridges, and with three keels, the keel on each side curved; face as long as the front. Eyes large, very prominent. Prothorax much arched, somewhat depressed. Mesothorax small, not keeled. Fore wings pale green, reddish-speckled, with some irregular pale luteous marks; costa and exterior border with many elongated blackish dots; veins



mostly reddish; transverse veins few and irregular, excepting some which form a submarginal line. Hind wings lurid; veins brown; an incomplete line of transverse veins; marginal veins not forked. Length of the body 5 lines, of the wings 11 lines.

*Hab.* Morty.

112. *HYSTEROPTERUM NANULUM*. *Fœm.* Fulvum, capite unicarinato non compresso, fronte vittis duabus nigris albedo marginatis fasciæque albida, facie nigra vitta albida; prothorace carina albida; mesothorace carinis tribus albidis; alis anticis fusciscentibus, venis fulvis, venis transversis antemediis liturisque paucis pallide viridibus; alis posticis nigricantibus.

*Female.* Tawny. Head not compressed, with slightly prominent borders; vertex nearly twice as broad as long, with one keel; front broader than long, slightly rounded on each side, slightly widening from the vertex to the face, with one keel, with a black whitish stripe on each side, and with a whitish band; face black, with a whitish band near the front. Prothorax with a whitish keel. Mesothorax with three whitish keels. Fore wings brownish; veins tawny; transverse veins numerous, irregular, those towards the base pale green; a few small pale-green marks in the disk. Hind wings blackish. Length of the body 2 lines, of the wings 5 lines.

*Hab.* Morty.

## Section 2.

*Fœm.* Corpus robustum, breve. Caput thorace multo angustius; vertex brevis; frons annulo e carinis duabus arcuatis; facies tricarinata. Antennæ breves, cylindricæ. Prothoracis latera attenuata. Mesothorax parvus. Abdomen supra gibbosum. Pedes breves, crassi, sulcati. Alæ anticæ latæ, bituberculatæ, apice rotundatæ, costa basi rotundata, margine exteriori subrecto, venis transversis plurimis.

*Female.* Body stout, short. Head much narrower than the thorax, with slightly prominent borders; vertex nearly four times as broad as long; front not broader than long, rounded on each side towards the face, notched on the fore border, with two keels, which form a ringlet; face lanceolate, with three indistinct keels. Eyes prominent. Antennæ short, cylindrical. Prothorax rounded in front, much attenuated on each side. Mesothorax small. Abdomen gibbous above. Legs short, very stout; femora and tibiæ keeled. Wings broad. Fore wings rounded at the tips; costa convex towards the base; exterior border nearly straight; interior angle determinate; a protuberance near the base of the hind border and another on the disk near the base; veins irregular; transverse veins numerous, irregular.

113. *HYSTEROPTERUM SPISSUM*. *Fœm.* Fulvum, fronte pedibusque nigro variis, alis anticis lituris paucis parvis nigricantibus alis posticis nigricantibus.

*Female.* Tawny. Front and legs mottled with black. Fore wings with a few small blackish marks near the two protuberances. Hind wings blackish. Length of the body 3 lines, of the wings  $6\frac{1}{2}$  lines.

*Hab.* Sula.

114. HYSTEROPTERUM INFORME. *Mas.* Fulvum, fronte subrugulosa bicarinata, facie non carinata, apicem versus carinata, prothorace carina transversa, mesothorace tricarinato, coxis testaceis, alis anticis litura nigricante, alis posticis fusciscentibus.

*Male.* Tawny, much like the preceding species in structure. Head with slightly prominent borders; vertex about four times as broad as long; front not broader than long, slightly rugulose, with two keels, which almost form a ringlet; face testaceous towards the tip, not keeled. Prothorax with a semicircular transverse keel. Mesothorax with three slight keels. Coxæ testaceous. Fore wings in structure like those of the preceding species, with a blackish mark in the disk. Hind wings brownish. Length of the body 2 lines, of the wings 5 lines.

*Hab.* Gilolo.

### Section 3.

*Fam.* Corpus robustum. Caput compressum, lateribus carinatis; frons longa, quinquecarinata, apud verticem cornuta; facies non carinata. Oculi magni. Antennæ breves, cylindricæ. Prothorax arcuatus. Mesothorax parvus. Pedes robusti, sulcati. Alæ latæ, subhyalinæ. Alæ anticæ apice rotundatæ, venis paucis.

*Female.* Body stout. Head compressed, with very prominent borders; vertex about twice as long as broad; front long, much widened, and with rounded sides towards the face, with five keels, which are united and form an oblique horn near the vertex; face not keeled. Eyes large, very prominent. Antennæ short, cylindrical. Prothorax arched, much attenuated on each side. Mesothorax small, somewhat triangular. Legs stout; femora and tibiæ furrowed. Wings broad, slightly hyaline. Fore wings rounded at the tips; longitudinal and transverse veins few, irregular; costal transverse veins and a submarginal line of veins regular. Hind wings with one irregular line of transverse veins.

115. HYSTEROPTERUM MINAX. *Fam.* Nigrum, capite pectoreque flavo notatis, abdomine piceo atomis apiceque flavis, pedibus spinulosis flavo conspersis; alis anticis fulvis flavo conspersis, linea media undulata guttisque marginalibus nigris, venis rufescentibus; alis posticis nigricanti-cinereis.

*Female.* Black. Head, thorax, and pectus with various yellow marks. Abdomen piceous, speckled with yellow, wholly yellow at the tip beneath. Legs minutely spinulose, speckled with yellow. Fore wings

tawny, shining, minutely speckled with yellow; a row of elongated black dots along the costa and along the exterior border, and a serpentine black line in the disk near the tip; veins reddish. Hind wings blackish cinereous; veins black. Length of the body 6 lines, of the wings 14 lines.

*Hab.* Ceram.

#### Section 4.

*Corpus robustum.* Caput compressum, lateribus subangulatis; vertex subcornutus; frons quinquecarinata, antice latescens; facies non carinata. Pedes robusti, sulcati. Alæ anticæ venis nonnullis transversis, linea submarginali e venis transversis bene determinata.

*Body stout.* Head compressed, with prominent borders, which form a slightly obtuse angle on each side between the front and the face; vertex twice as long as broad, forming with the contiguous middle part of the front a short horn; front nearly twice or thrice as long as broad, widening from the vertex, with five keels, of which the inner pair are abbreviated towards the face; face not keeled. Thorax like that of *Issus* in structure. Legs stout; femora and tibiæ furrowed. Fore wings with some irregular transverse veins; submarginal line of transverse veins and costal transverse veins regular.

116. *HYSTEROPTERUM INVARIUM.* *Fæm.* Testaceum, fusco conspersum, fronte antica fusca testaceo conspersa, facie annulo nigro fusiformi, tarsis fuscis; alis anticis punctis marginalibus elongatis albidis, puncto subapicali nigro; alis posticis nigricanti-cinereis.

*Female.* Testaceous, brown-speckled. Front towards the face brown, with testaceous speckles; face with a black fusiform ringlet. Tarsi brown. Fore wings with elongated whitish points along the costa and along the exterior border; a black point on the disk near the tip of the costa. Hind wings blackish cinereous. Length of the body  $4\frac{1}{2}$  lines, of the wings 9 lines.

*Hab.* Mysol.

This species very closely resembles the preceding one.

117. *HYSTEROPTERUM VITTATUM.* *Fæm.* Testaceum, capitis lateribus fusco trifasciatis, fronte et facie disco fuscis testaceo conspersis, vertice et prothorace albedo-univittatis, thorace fusciscente, abdominis disco ventrali nigro testaceo-consperso, pedibus fusco nigroque conspersis; alis anticis punctis nonnullis nigris, vitta postica fusca e lineis duabus testaceis interrupta; alis posticis nigricanti-cinereis.

*Female.* Testaceous. Head on each side with three brown bands; front and disk of the face brown, with testaceous speckles; vertex and prothorax with a whitish stripe. Thorax mostly brownish. Disk of the abdomen beneath black, testaceous-speckled. Legs

speckled with black and with brown. Fore wings with blackish points along the costa, with a few blackish points in the disk; an irregular brown stripe along the hind border, interrupted by two oblique testaceous lines. Hind wings blackish cinereous. Length of the body  $4\frac{1}{2}$  lines, of the wings 9 lines.

*Hab.* New Guinea.

Gen. GILDA.

*Mas. Corpus robustum. Caput* thorace vix angustius, angulis carinatis; vertex transversus, subcarinatus; frons subcarinata, lateribus rotundatis, carinula transversa. *Oculi* magni. *Scutum* brevissimum, unicarinatum. *Scutellum* magnum. *Pedes* robusti; tibiæ posticæ bispinosæ. *Alæ* anticæ venis postmediis plurimis.

*Male.* Body stout. Head nearly as broad as the thorax, with slightly prominent borders; vertex twice as broad as long, with a slight keel; front not longer than broad, rounded on each side, broader towards the face, with a slight transverse keel near the vertex, and with a slight longitudinal keel. Eyes large, prominent. Scutum very short, arched in front, with one keel; scutellum large. Legs stout: hind tibiæ with two spines. Fore wings with many transverse veins on the exterior half.

118. GILDA VITIVENTRIS. *Mas.* Testacea, vertice litura antica rufa diffusa, vitta ventrali brevi lata nigricante, alis posticis pallide cinereis.

*Male.* Testaceous. Vertex with a diffuse red mark on the fore border. Abdomen beneath with a broad, shortish, black stripe. Hind wings pale cinereous; veins black. Length of the body  $2\frac{1}{2}$  lines, of the wings 6 lines.

*Hab.* New Guinea.

Gen. HEMISPHERIUS, *Schaum.*

119. HEMISPHERIUS CIRCUMCINCTUS, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 586.

*Hab.* Mysol.

120. HEMISPHERIUS VITTIGER, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 586.

*Hab.* Ké.

121. HEMISPHERIUS TÆNIATUS, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 587.

*Hab.* Waigiou.

122. HEMISPHERIUS SIGNATUS, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 587.

*Hab.* Batchian.

123. *HEMISPHERIUS TRISTIS*, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 587.

*Hab.* Batchian.

124. *HEMISPHERIUS FASCIATUS*, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 587.

*Hab.* Mysol.

125. *HEMISPHERIUS VILICUS*, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 588.

*Hab.* Mysol.

126. *HEMISPHERIUS PULCHERRIMUS*, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 588.

*Hab.* Batchian.

127. *HEMISPHERIUS VIDUUS*, *Stal, Trans. Ent. Soc. Lond.* 3rd ser. i. 589.

*Hab.* Mysol.

128. *HEMISPHERIUS LATIVITTA*. *Fem.* Ochraceus, ovatus; abdomine subtus nigro, segmentorum marginibus posticis pallide flavescens, pedibus nigro variis, alis anticis disco lineaque tenui brevi nigris.

*Female.* Ochraceous, oval. Abdomen black beneath; hind borders of the segments pale yellowish. Hind femora, anterior knees, a spot on the fore femora and spines of the hind tibiae black; anterior femora dilated. Fore wings with a black disk; a slender black costal line from half the length to the tip. Length of the body 2 lines.

*Hab.* Morty.

The markings of the fore wings of this species sufficiently distinguish it from *H. latipes*, Stål.

129. *HEMISPHERIUS NIGROLINEATUS*. *Fem.* Flavescens, fronte apud faciem dilatata, facie nigra, prothoracis margine postico piceo, abdomine subtus nigro segmentis flavo marginatis, femoribus posticis piceis, alis anticis piceis vittis duabus flavescens connexis.

*Female.* Yellowish, oval; vertex a little narrower than the eye, transversely; front longer, more prominent, and more dilated towards the face than that of most other species; face black. Hind border of the prothorax piceous. Abdomen beneath black; hind borders of the segments pale yellow. Hind femora piceous. Fore wings piceous, with two yellowish stripes, which are connected at both ends; first stripe along the suture; second along the costa, broader than the first, including a black costal line which extends along half the length to the tip. Length of the body 2 lines.

*Hab.* Morty.



130. *HEMISPHERIUS CERVINUS*. *Mas.* Cervinus, brevi-ovatus, capite thoraceque sordide ochraceis, fronte thoraceque apud discos piceis, vertice frontisque margine antico flavescentibus, abdomine subtus nigro segmentis flavo marginatis, pedibus anticis sordide ochraceis, pedibus posterioribus flavis femoribus basi piceis.

*Male.* Fawn-colour, dull, dilated, oval. Head and thorax dull ochraceous. Disk of the front and of the thorax piceous; vertex and fore border of the front yellowish. Abdomen beneath black; hind borders of the segments yellow. Fore legs dull ochraceous; posterior legs yellow; their femora piceous towards the base. Length of the body  $1\frac{1}{2}$  line.

*Hab.* New Guinea.

The dull colour and the fore wings without a costal stripe distinguish it from *H. viduus*.

131. *HEMISPHERIUS PLAGIATUS*. *Mas.* Fulvus, femoribus posticis piceis; alis anticis piceis, vitta postica fulva vittaque subcostali pallide flava, costa nigra.

*Male.* Tawny. Front broader than long; face paler than the thorax. Hind femora piceous. Fore wings piceous, with a tawny stripe along the suture, and with a narrow yellow subcostal stripe; costa black. Length of the body  $1\frac{1}{4}$  line.

*Hab.* Sula.

It has most resemblance to *H. maculipes*, but the unspotted legs and the subcostal line of the fore wings sufficiently distinguish it.

132. *HEMISPHERIUS CONCOLOR*. *Mas.* Niger, brevi-ovatus, capite subtus pallide flavo, vertice fulvo, frontis margine antico pallide flavo, abdomine subtus piceo segmentis flavo-pallido marginatis, pedibus pallide flavis, femoribus tibiisque anterioribus piceo vittatis, alis anticis vitta subcostali flavescente.

*Male.* Black, dilated, oval. Head pale yellow beneath; vertex tawny; front with a pale yellow band on the fore border. Abdomen beneath piceous; hind borders of the segments pale yellow. Legs pale yellow; anterior tarsi, stripes of the anterior femora and tibiae, and tips of the hind tibiae piceous. Fore wings with a yellowish subcostal stripe, which extends along the whole length and does not diverge. Length of the body 2 lines.

*Hab.* New Guinea.

The red legs of *H. tristis* sufficiently distinguish it from this species.

133. *HEMISPHERIUS COLLARIS*. *Mas.* Ferruginco-fuscus, ovatus, vertice frontisque margine antico pallide flavis, facie nigra; abdomine subtus nigricante, vitta lata fulva, segmentis flavo-pallido marginatis;

pedibus fulvis, coxis anterioribus pallide flavis, femoribus posticis piceis, anticis flavo univittatis.

*Male.* Ferruginous brown, oval. Vertex and a narrow band on the fore border of the front pale yellow; face black. Abdomen beneath blackish, with a broad tawny stripe; hind borders of the segments pale yellow. Legs tawny; anterior coxæ pale yellow; hind femora piceous, except at the tips. Fore wings with a narrow yellow stripe which extends from the humeral angle very near the costa and diverges slightly from the latter along the outer two-thirds of its length. Length of the body 2 lines.

*Hab.* New Guinea.

This species may be distinguished from *H. tristis* by the colour of the front and of the legs, by the longer fore wings, and by the stripe on the latter.

134. *HEMISPHERIUS LUNARIS.* *Fæm.* Pallide flavus, brevi-ovatus, capite nigro strigis duabus fulvis, vertice rufescenti-fulvo fascia flava, thorace piceo vitta lanceolata rufescenti-fulva, abdomine subtus piceo segmentis flavo marginatis, pedibus fulvis, femoribus posticis piceis, alis anticis piceo trivittatis.

*Female.* Pale yellow, dilated oval. Head black, pale yellow beneath; vertex reddish tawny, with a yellow band on the hind border; a tawny streak on each side in front of the eye. Thorax piceous, with a reddish-tawny lanceolate stripe. Abdomen beneath piceous; hind borders of the segments yellow. Legs tawny; hind femora piceous. Fore wings with three piceous stripes; first stripe near the suture; second in the disk, slightly lunate, broader than the first, which it joins at the base and near the end of the suture; third costal. Length of the body 2 lines.

*Hab.* New Guinea.

It has most resemblance to *H. villicus*, from which its black front especially distinguishes it.

135. *HEMISPHERIUS SUBMARGINALIS.* *Fæm.* Niger, brevi-ovatus, capite rufescenti-fulvo guttis duabus verticis nigricantibus, frontis disco facieque nigris, prothorace lituris tribus rufescenti-fulvis, segmentis ventralibus fulvo marginatis, pedibus fulvis, femoribus posticis piceis, alis anticis vittis duabus maculaque rufescenti-fulvis.

*Female.* Black, dilated, oval. Head reddish tawny; vertex with two blackish dots, a little narrower than the eye transversely; disk of the front black; face black. Prothorax black, with three reddish tawny marks, one in front and one on each side of the hind border. Abdomen beneath with the hind borders of the segments tawny. Legs tawny; hind femora piceous. Fore wings with two reddish-tawny stripes; one on the suture, connected with a large spot of the same

hue; the other subcostal, commencing at a little before half the length and joining the first near the end of the suture. Length of the body  $1\frac{3}{4}$  line.

*Hab.* Gilolo.

It has most resemblance to *H. pulcherrimus*, from which it may be distinguished by the subcostal stripe.

136. *HEMISPHERIUS VIRIDIS*. *Mas et Fœm.* Herbidus, brevi-ovatus, facie, pectore abdomineque nigris, segmentorum abdominalium marginibus posticis fulvis, pedibus fulvis, femoribus posticis nigris, alis anticis costæ dimidio apicali nigro.

*Male and Female.* Grass-green, dilated oval. Vertex about as broad as the eye transversely; face black. Pectus and abdomen black; hind borders of the abdominal segments tawny. Legs tawny; hind femora black. Fore wings with a black line along half the length of the costa from the tip. Length of the body  $1\frac{1}{4}$  line.

*Hab.* Morty.

A mutilated specimen, of which the thorax and the fore wings are pale luteous, may be a variety of this species.

137. *HEMISPHERIUS DILATATUS*. Pallide fulvus, latissimus, fronte nigra margine antico flavo, facie nigra, abdomine subtus nigro segmentis flavo pallido marginatis, pedibus pallide flavis femoribus posticis piceis, alis anticis piceis vitta costali angusta pallide flava.

Pale tawny, very broad. Front black, not longer than broad, with a yellow band on the fore border; face black. Abdomen black beneath; hind borders of the segments pale yellow. Legs pale yellow; hind femora piceous, except the tips. Fore wings piceous, with a narrow pale yellow costal stripe. Length of the body  $1\frac{1}{4}$  line.

*Hab.* Flores.

It may be distinguished from all the preceding species by its more dilated fore wings.

Gen. *BARDUNIA*, *Stål*.

138. *BARDUNIA NASUTA*, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 589.

*Hab.* Batchian.

Gen. *CORETHRURA*, *Hope*.

139. *CORETHRURA FUNEBRIS*, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 589.

*Hab.* Tondano.

Gen. *EURYBRACHYS*, *Guérin*.

140. *EURYBRACHYS INSIGNIS*, *Hope*, *Trans. Linn. Soc.* xix. 134. pl. 12. f. 9.

*Hab.* Sumatra. Inhabits also the Philippine Isles.

Var. *Mas*. Subcervino-cinerea, alis anticis strigulis plurimis transversis pallide aut saturate fuscis, strigulis costalibus et submarginalibus

nigris, plagis guttisque fuscis paucis diffusis, alis posticis albis, fascia postmedia brevi undulata interrupta punctisque submarginalibus nigris.

*Male.* Cinereous, with a slight tinge of fawn-colour. Fore wings with very numerous minute transverse pale or dark brown streaks, a row of costal and another of submarginal minute black streaks, a few brown diffuse patches and dots. Hind wings white, with a short interrupted undulating black band at three-fourths of the length, and with a submarginal line of three or four black points. Length of the body  $5\frac{1}{2}$  lines, of the wings 23 lines.

141. *EURYBRACHYS ISABELLA*, *White*. *Mas*. Fulva, vertice marginato, fronte scite striata, abdomine rufo, pedibus piceis, alis anticis saturate viridibus apice cinereis, macula basali fasciaque arcuata luteis, alis posticis niveis.

*Male.* Tawny. Head rather narrower than the thorax; vertex arched, deeply bordered, twice as broad as long; front hardly convex, finely striated longitudinally, very much broader than long. Thorax very short. Abdomen red, brightest beneath. Legs piceous. Fore wings deep green, which hue is divided from the cinereous apical part by a much outward-curved luteous line; a large luteous spot at the base. Hind wings snow-white. Length of the body 9 lines, of the wings 25 lines.

*Hab.* Sumatra.

### Subtribe DERBOIDES, *Spinola*.

#### Gen. THRACIA, *Westwood*.

142. *THRACIA EPHEMERALIS*. *Mas et Fæm.* Lutea, pectore pedibusque pallidioribus, thorace plagis duabus albidis, postscutello piceo, abdomine fascia apicque piceis fasciaque intermedia flavescente, alis anticis pellucidis costa lutea venis nigris.

*Male and Female.* Luteous. Pectus and legs paler. Head with prominent borders; vertex extremely narrow; front widening towards the face, which is long and keeled. Antennæ cylindrical, transversely rugulose; terminal joint conical, small. Thorax projecting somewhat over the back of the head; a whitish patch on each side; postcutellum piceous. Abdomen with a piceous band, beyond which there is a pale yellowish band; tip piceous. Fore wings pellucid; veins black; costa luteous, except towards the tip; a disjointed and very oblique line of transverse veins. Length of the body  $2\frac{1}{2}$ –3 lines, of the wings 13–15 lines.

*Hab.* Aru; New Guinea; Mysol.

143. *THRACIA LIMNOBIALIS*. *Mas.* Lutea, capite nigro-fasciato, antennis rufis fascia subapicali nigra, thorace pectoreque pallide virides-

centibus, alis anticis cinereis hyalinis costa lutea apicem versus fusca, venis nigris, venis duabus transversis venisque tribus apicalibus fusco nebulosis.

*Male.* Luteous. Head keeled; a black band between the antennæ. Antennæ red, black towards the tips; apical joint red. Thorax and pectus pale greenish. Fore wings cinereous, hyaline; costa luteous, brown towards the tips; veins black; a disjointed and very oblique line of transverse veins, of which the two next the costa are clouded with brown; tips of the three marginal veins on the exterior border next the costa clouded with brown. Length of the body  $3\frac{1}{2}$  lines. of the wings 13 lines.

*Hab.* Sula.

144. *THRACIA SCUTELLARIS.* *Mas.* Albido-flava, antennis apice ochraceis, thorace pallide fusco strigis duabus pallidioribus, lituris duabus anticis scutelloque albis, abdomine vittis duabus nigris, alis pellucidis venis nigris, alis anticis costa fusca, vena costali rufa, venis transversis fusco nebulosis.

*Male.* Whitish yellow. Head between the eyes forming a double keel which is forked on the triangular vertex: Antennæ with ochraceous tips. Thorax pale brown, with a paler streak on each side, and with three keels; a mark on each side in front and the scutellum white. Abdomen with a black stripe on each side. Wings pellucid; veins black. Fore wings with the transverse veins clouded with brown; costa brown, darker and irregularly brown beyond the middle; costal vein red. Hind wings less than half the length of the fore wings. Length of the body 3 lines, of the wings 12 lines.

*Hab.* Morty.

145. *THRACIA BASALIS.* *Mas.* Lutea, capite rufo, mesothorace carina transversa guttisque duabus lateralibus nigris, abdomine fasciis duabus rufis, alis anticis pellucidis basi fuscis, costa rufa nigro tripunctata, venis rufescentibus apud marginem exteriorem fusco marginatis, venis transversis nigris, alis posticis fuscis brevissimis.

*Male.* Luteous. Head red, forming a double keel between the eyes, the keel forked on the vertex, which is triangular. Hind part of the mesothorax with a black dot on each side, and a black transverse ridge. Abdomen with two broad red bands, the second extending to the tip. Fore coxæ mostly red. Fore wings pellucid, brown at the base; veins reddish, transverse veins black; costa red, with three black points, the first beyond the middle, the second near the tip, the third at the tip; vein between the second point and the tip bordered with brown. Hind wings brown, extremely short. Length of the body 3 lines, of the wings 12 lines.

*Hab.* Waigion.

146. *THRACIA NERVOSA.* *Mas et Fœm.* Testacea, capite vittis quatuor



fuscis, mesothorace vittis duabus fuscis latis, plagis duabus pallide testaceis, abdomine maculis duabus lateralibus nigris magnis, alis anticis cinereis hyalinis, venis nigris, linea transversa e venis fusco nebulosis, costa lurida fuscescente trinitata.

*Male and Female.* Testaceous. Head porrect, acute and rostriform in front, with two brown stripes on each side. Antennæ with the usual structure. Prothorax extending partly over the vertex. Mesothorax with a broad brown stripe and a pale testaceous patch on each side. Abdomen with a large black spot on each side. Fore wings cinereous, hyaline; veins black; a disjointed and very oblique line of transverse veins which are more or less clouded with brown; costa lurid, with three small brownish marks; veins proceeding from the costal vein clouded with brown at the base. Length of the body 3 lines, of the wings 12 lines.

*Hab.* Mysol; New Guinea.

147. *THRACIA ANTICALIS.* *Mas.* Lutea, thorace fascia lata fusca, abdomine vittis duabus nigricantibus basi apiceque connexis, alis cinereis vittis nigris; alis anticis vitta costali guttisque tribus apicalibus fuscis, lituris duabus fuscis obscurioribus, 1<sup>a</sup> postmedia, 2<sup>a</sup> subapicali, venis transversis fusco vix nebulosis.

*Male.* Luteous, pale yellow beneath. Head forming between the eyes a double keel which is parted on the triangular vertex; face with three keels. Thorax with a broad brown band; the lateral keels diverging in front from the middle one. Abdomen with two blackish stripes, which are united at each end. Wings cinereous; veins black. Fore wings with a brown costal stripe, which is accompanied by two darker brown marks; of these one is beyond the middle, and the other near the tip; three brown apical dots in a transverse line; transverse veins hardly clouded with brown. Hind wings much less than half the length of the fore wings. Length of the body 3 lines, of the wings 12 lines.

*Hab.* Mysol.

148. *THRACIA COSTALIS.* *Mas.* Lutea, abdominis dorso nigricante segmentis luteo pallido marginatis, lituris lateralibus luteis, alis cinereis hyalinis venis nigris, alis anticis basi fuscis vitta costali dentata nigricanti-fusca, linea transversa subapicali e punctis venarum fuscis.

*Male.* Luteous, pale beneath. Head forming between the eyes a double keel, which is parted on the triangular vertex; face with three keels. Thorax with the lateral keels diverging in front from the middle one. Abdomen blackish above; hind borders of the segments pale luteous; some luteous marks on each side. Wings cinereous, hyaline; veins black. Fore wings brown at the base and with a blackish brown dentate costal stripe; a transverse subapical line of brown points on the veins. Hind wings much less than half

the length of the fore wings. Length of the body  $2\frac{1}{2}$  lines, of the wings 11 lines.

*Hab.* Batchian; Mysol.

149. *THRACIA NIVIFERA*. *Mas.* Lutea, facie thoraceque tricarinatis, antennis rufescentibus scabris, pectore pedibusque pallide luteis, abdomine cristato sexualibus magnis rufescentibus apice nigris, alis anticis diaphanis guttis quatuor costalibus (una postica) spatioque subapicali fuscis, apice alba, vena costali rufa, alis posticis parvis cinereis apice fuscis.

*Male.* Luteous. Head between the eyes with a keel which is parted on each side of the triangular vertex; face with three keels. Antennæ reddish, scabrous. Thorax with three keels, the lateral keels diverge in front from the middle one. Pectus and legs pale luteous. Abdomen crested above; apical appendages large, reddish, with black tips. Fore wings pellucid; two brown dots near the base, one on the costa the other on the hind border; three exterior brown costal dots; space towards the tips obliquely brown; tips white, with white veins; veins black, luteous towards the base; costal vein red. Hind wings cinereous, brown towards the tips, less than one-third of the length of the fore wings. Length of the body  $2\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Batchian.

150. *THRACIA DORSALIS*. *Mas.* Lutea, thorace nigricanti-fusco lateribus anticis luteis, abdominis dorso nigricanti-fusco, alis fuscis nigro venosis, alis anticis apud costam nigricantibus venis transversis fusco obscuro nebulosis.

*Male.* Luteous, paler beneath. Head forming between the eyes a double keel, which is parted on the triangular vertex. Thorax blackish brown, except on each side in front and between the wings behind; the lateral keels diverging in front from the middle one. Abdomen blackish brown above. Wings brown; veins black. Fore wings blackish along the costa; transverse veins clouded with dark brown. Hind wings much less than half the length of the fore wings. Length of the body  $2\frac{1}{2}$  lines, of the wings 11 lines.

*Hab.* New Guinea.

151. *THRACIA ABRUPTA*. *Mas.* Lutea, capite lateribus carinatis, facie fulva tricarinata, thorace carinis tribus pallidis, pectore pedibusque pallide flavis, abdomine fusco notato apicem versus rufo, sexualibus maximis, alis pellucidis nigro venosis, alis anticis vitta costali fusca guttam pellucidam strigamque luteam includente apicem versus valde dilatata, vena costali rufa, venis transversis fusco vix nebulosis, alis posticis ex parte fuscis.

*Male.* Luteous. Head forming between the eyes a double keel, which is parted on the triangular vertex; face tawny, with three

keels. Antennæ rather broad, thickly punctured. Thorax with three pale keels, the keel on each side diverging in front from the middle one. Pectus and legs pale yellow. Abdomen minutely marked with brown, bright red towards the tip; apical appendages very large. Wings pellucid; veins black. Fore wings with a narrow brown costal stripe which contains a pellucid dot beyond the middle, and a luteous streak towards the tip, and is dilated and forms a transverse brown line near the tip; costal vein red; veins whitish along the hind border; transverse veins hardly clouded with brown. Hind wings mostly brown, little more than one-third of the length of the fore wings. Length of the body  $2\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Gilolo.

152. *THRACIA RUFIFINIS*. *Mas*. Testacea, facie basi antennisque rufis, prothoracis lateribus albidis dilatatis, abdomine apicem versus rufo, macula ventrali subapicali nigra, pedibus pallidissime flavis, alis pellucidis nigro venosis, alis anticis venis transversis fusco subnebulosis, venis marginalibus fusco uniguttatis apice albidis, costa lurida fusco subnebulosa, venis e vena costali basi fusco nebulosis.

*Male*. Testaceous. Vertex and front very narrow; face red towards the base. Antennæ bright red, scabrous, elongate fusiform. Thorax with three keels, the lateral keels converging hindwards; sides of the prothorax dilated and whitish. Abdomen bright red towards the tip, a black subapical dot beneath. Legs very pale yellow. Wings pellucid; veins black. Fore wings with a disjointed and very oblique line of transverse veins which are slightly clouded with brown; veins joining the exterior border with whitish tips, near which each has a brown dot; costa lurid, here and there slightly clouded with brown; veins proceeding from the costal vein clouded with brown at the base. Hind wing about one third of the length of the fore wings. Length of the body  $2\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Morty.

153. *THRACIA PUNCTIPENNIS*. *Mas et Fæm*. Fulva, subtus pallide flavescens, facie thoraceque tricarinatis, antennis rufis scabris, maris sexualibus parvis, pedibus pallide flavescens, alis anticis fuscis cinereo conferte guttatis, alis posticis parvis cinereis.

*Male and Female*. Tawny, pale yellowish beneath. Head forming between the eyes a double keel, which is parted on each side of the triangular vertex; face with three keels. Antennæ red, scabrous. Thorax with three keels, the keel on each side diverging in front from the middle one. Abdomen of the male with small apical appendages. Legs pale yellowish. Fore wings brown, with numerous cinereous dots; these dots are confluent along the middle part, and occupy nearly the whole surface towards the hind border; transverse veins and tips of the veins along the hind border clouded with brown.

Hind wings cinereous, less than half the length of the fore wings. Length of the body  $2\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Mysol; New Guinea.

154. *THRACIA SEXNOTATA*. *Mas*. Testacea, thorace postico albido, abdomine fascia antemedial apiceque rufis vittis duabus lateralibus nigris, pedibus albido-flavis, alis pellucidis venis nigris, alis anticis maculis tribus subcostalibus maculisque tribus apicalibus fuscis, venis transversis fusco vix nebulosis, costa rufa.

*Male*. Testaceous, whitish yellow beneath. Vertex and front extremely narrow, forming a keel between the eyes. Antennæ pale testaceous. Hind part of the thorax whitish. Abdomen with a black stripe along each side, bright red at the tip and with a bright red band near the base. Legs whitish yellow. Wings pellucid; veins black. Fore wings with three brown subcostal spots and three brown apical spots; transverse veins hardly clouded with brown; costa bright red. Hind wings about one-third of the length of the fore wings. Length of the body 2 lines, of the wings 9 lines.

*Hab.* Aru.

155. *THRACIA CUMULATA*. *Mas et Fœm*. Fulva, subtus pallide flavescentis, facie thoraceque tricarinatis, antennis parvis, maris sexualibus sat magnis, pedibus pallide flavescentibus, alis anticis fuscis cinereo conferte punctatis, alis posticis parvis fusciscentibus.

*Male and Female*. Tawny, pale yellowish beneath. Head forming between the eyes a double keel, which is parted on each side of the triangular vertex; face with three keels. Antennæ rather shorter and narrower than in most of the other species. Thorax with three keels, the keels on each side diverging in front from the middle one. Abdomen of the male with rather large apical appendages. Legs pale yellowish. Fore wings brown, with numerous cinereous points along the veins; transverse veins and tips of the veins along the hind border clouded with dark brown. Hind wings brownish, less than half the length of the fore wings. Length of the body 3 lines, of the wings 12 lines.

*Hab.* Amboina; Bouru.

156. *THRACIA FASCIATA*. *Mas*. Lutea, facie fusciscentis tricarinata, antennis brevissimis, thorace lateribus carinisque tribus albidis, abdomine fusciscentis albidoque consperso sexualibus minimis, pedibus albidis fusco strigatis, alis anticis diaphanis fasciis tribus fuscis latissimis apud costam connexis et guttatis, venis nigris albido notatis, alis posticis parvis fusciscentibus postice diaphanis.

*Male*. Luteous. Head between the eyes with two approximate keels, which diverge from each other on the vertex; face brownish above and beneath, with three keels. Antennæ not half the length of those of the preceding species. Thorax with whitish borders, and with

three whitish keels. Abdomen with many small brownish and whitish marks; apical appendages very small. Legs whitish; a short brown streak on each of the femora and of the tibiæ; tarsi and tips of the tibiæ brown. Fore wings pellucid, with three very broad and irregular brown bands, which are connected on the costa, where they enclose some pellucid dots; some brown dots in the disk; veins luteous at the base and along the costa, elsewhere black with whitish marks. Hind wings brownish, irregularly pellucid along part of the hind border, nearly half the length of the fore wings. Length of the body  $2\frac{1}{2}$  lines, of the wings 15 lines.

*Hab.* Mysol.

157. *THRACIA FUSCIPENNIS*. *Mas.* Fulva, capite perangusto lateribus carinatis, facie thoraceque tricarinatis, prothorace rufescente, pectore pedibusque pallide flavescentibus, sexualibus maximis, alis fuscis rufescente venosis, alis anticis costa albida lituris duabus subcostalibus nigricantibus, venis transversis fusco subnebulosis, alis posticis parvis.

*Male.* Tawny. Head with prominent borders which are almost united between the eyes and diverge towards the vertex and towards the face; vertex triangular; face with three keels. Thorax with the usual three keels. Prothorax reddish. Pectus and legs pale yellowish. Abdomen with very large apical appendages. Wings brown; veins reddish. Fore wings with a whitish costa; two small blackish subcostal marks, one beyond the middle, the other near the tip; transverse veins slightly clouded with brown. Hind wings much less than half the length of the fore wings. Length of the body 3 lines, of the wings 14 lines.

*Hab.* Aru.

158. *THRACIA ABSCISSA*. *Fem.* Ferruginea, capitis lateribus albidis carinatis, facie tricarinata, thorace carinis tribus albidis, pedibus albidis, alis fuscis nigro venosis, alis anticis costa margineque apicali albo punctatis, alis posticis parvis.

*Female.* Ferruginous. Head with two whitish keels, which are nearly connected between the eyes and diverge slightly towards the vertex and towards the face; the latter has three keels. Thorax with three whitish keels, the keel on each side diverging in front from the middle one. Legs whitish. Wings dark brown; veins black. Fore wings with white points along the costa and about the tips. Hind wings hardly one-third of the length of the fore wings. Length of the body  $2\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Sula.

159. *THRACIA ALBIDA*. *Mas.* Albida, facie thoraceque tricarinatis, sexualibus parvis, alis albidis testaceo venosis, alis anticis vena subcostali nigricante nebuloosa linea transversa subapicali e punctis fuscis, alis posticis parvis.



*Male.* Whitish. Head forming a keel between the eyes; face with three keels. Thorax with three keels, the keel on each side diverging in front from the middle one. Abdomen with small apical appendages. Wings whitish; veins pale testaceous. Fore wings with the subcostal transverse veins blackish-clouded; a transverse line of brown subapical points. Hind wings about one-third of the length of the fore wings. Length of the body 2 lines, of the wings 10 lines.

*Hab.* Sula.

160. *THIRACIA ALBIPES.* Nigra, capite thoraceque albo carinatis, pectore maculis duabus lateralibus luteis, pedibus albis, alis anticis striga longitudinali liturisque posticis et subapicalibus albo-hyalinis, alis posticis parvis.

Black. Head and thorax with a white keel. Pectus with a luteous spot on each side. Legs white. Fore wings with an irregular white hyaline longitudinal streak in the disk and with white hyaline marks of various size and shape about the tips and along the hinder border. Hind wings not more than half the length of the fore wings. Length of the body  $1\frac{1}{2}$  line, of the wings 8 lines.

*Hab.* Flores.

Subtribe FLATOIDES, *Spinola*.

Gen. FLATOIDES, *Guérin*.

161. *FLATOIDES SUBRUFESCENS.* *Mas.* Testaceus, rufescente conspersus, subtus albidus, fronte unicarinata, facie non carinata; mesothorace quadricarinato, alis anticis tuberculatis puncto nigro venis transversis plurimis, alis posticis albidis fusco venosis.

*Male.* Testaceous, minutely speckled with red; disk whitish and unspeckled beneath. Vertex arched, short, concave; front not longer than broad, with prominent borders, and with a keel which extends along half the length from the vertex; face not keeled. Prothorax much arched. Mesothorax with four slight keels. Fore wings with minute tubercles and with a larger tubercle in the disk near the base, and with another on the hind border at somewhat beyond the middle, this tubercle accompanied by a black point; transverse veins forming several irregular lines and one regular submarginal line. Hind wings whitish; veins brown, robust; three transverse veins—one antemedial and near the interior border, the other two post-medial. Length of the body  $3\frac{1}{2}$  lines, of the wings 9 lines.

*Hab.* Morty; Mysol; New Guinea.

162. *FLATOIDES FASCIATUS.* *Mas.* Testaceus, fronte tricarinata, facie non carinata; prothorace et mesothorace bicarinatis, alis anticis tuberculatis fascia antemedialia lincisque duabus postmediis trans-

versis arcuatis punctularibus ferrugineis venis transversis plurimis venis marginalibus non furcatis, alis posticis cinereis.

*Male.* Testaceous, paler beneath. Head with prominent borders; vertex short; front rather longer than broad, narrower towards the face, with three abbreviated keels, the keel on each side very slight; face not keeled. Prothorax much arched, hiding part of the vertex, with two slight approximate keels. Mesothorax with two keels, which converge hindward. Fore wings tuberculate at the base and along the costa; two larger tubercles, one in the disk near the base, the other on the interior border; an irregular antemedial ferruginous band and two postmedial transverse curved lines of ferruginous points; transverse veins numerous, irregular; costal transverse veins rather irregular, some of them forked; marginal veins not forked. Hind wings cinereous, with an incomplete line of transverse veins. Length of the body 4 lines, of the wings 10 lines.

*Hab.* Waigiau.

The brown band and the double row of submarginal points in the fore wings distinguish it from *F. subrufescens*.

163. *FLATOIDES PLAGIATUS*. *Mas.* Testaceus, subtus albidus, vertice fuscescente binnaculato, fronte bisulcata, facie non carinata, prothorace unicarinato, mesothorace fuscescente tricarinato, alis anticis nigricante biguttatis fusco variis rufo tuberculatis lineis tribus e venis transversis, 3<sup>a</sup> venisque marginalibus fuscis, alis posticis albis.

*Male.* Testaceous, whitish beneath. Vertex much arched, with a brownish spot on each side; front very much longer than broad, with prominent borders and with two slight approximate furrows; face not keeled. Prothorax much arched, with one keel. Mesothorax mostly brownish, with three slight keels. Fore wings varied with brown; tubercles red, minute; a blackish dot in the disk near the base, and another on the hind border beyond the middle; three lines of transverse veins; second and third comparatively regular; third submarginal, brown; marginal veins brown. Hind wings white. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* New Guinea.

164. *FLATOIDES SEMIALBUS*. *Mas.* Albido-testaceus, capite thoraceque fusco variis, vertice unicarinato, fronte subfusiformi tricarinato, mesothorace quinquecarinato, alis anticis albidis fere hyalinis maculis lineaque submarginali arcuata guttulari nigris, venis testaceis, venis transversis plurimis ex parte nigricantibus, venis marginalibus non furcatis, alis posticis albis.

?*Flata pyralis*, *Guér. Voy. Coquille*, 192; *Atlas Ins.* pl. 10. p. 11.

*Male.* Whitish testaceous. Head above and thorax varied with brown. Head with prominent borders; vertex arched, with one keel; front subfusiform, with three short keels, of which the keel on each side is

very slight; face not keeled. Prothorax much arched, partly hiding the vertex, with three keels. Mesothorax slightly arched, with five keels. Abdomen with a large apical valve. Fore wings whitish, nearly hyaline, with a few irregular black spots, and with a curved submarginal row of black dots; veins testaceous; transverse veins numerous, irregular, except those of the submarginal line, some of them blackish; many somewhat irregular transverse costal veins; marginal veins not forked. Hind wings white. Length of the body 3 lines, of the wings 10 lines.

*Hab.* Aru; Mysol. *F. pyralis* inhabits New Guinea.

165. *FLATOIDES SIMPLEX*. *Mas et Fœm.* Pallide testaceus, capite subascendente, vertice unicarinato, fronte et mesothorace tricarinatis, alis albidis fere hyalinis, alis anticis lineis duabus e venis transversis, venis marginalibus quatuor furcatis.

*Male and Female.* Pale testaceous. Head slightly ascending, with slightly prominent borders; vertex very prominent, with one keel, full twice as broad as long; front more than twice as long as broad, slightly angular on each side, with three keels; the keel on each side oblique, much shorter than the middle one. Prothorax much arched. Mesothorax with three keels, the keel on each side connected in front with the middle one. Wings whitish, nearly hyaline; veins whitish. Fore wings with two postmedial lines of transverse veins; costal transverse veins numerous, parallel; four of the marginal veins forked. Hind wings with an incomplete line of transverse veins; one or two of the marginal veins forked. Length of the body 4 lines, of the wings 11 lines.

*Hab.* Ambonia; Ceram; Dory; Morty; Mysol; New Guinea; Ternate.

#### Gen. *RICANIA*, *Germar.*

166. *RICANIA SUBATOMARIA*. *Mas.* Piceo-nigra, capite, pectore, ventre pedibusque fulvis, fronte tricarinata ex parte rugulosa, thorace piceo tricarinato carinis lateralibus furcatis, alis anticis punctis nonnullis guttaque postica necnon guttis punctisque marginalibus albis, alis posticis punctis mediis margineque postico albis.

*Male.* Piceous black. Head, pectus, abdomen beneath, and legs tawny. Vertex six times as broad as long; front nearly twice as broad as long, with three very slight keels, partly and very slightly rugulose in the disk, slightly elevated on each side. Thorax piceous, with three slight keels; the lateral keels forked. Fore wings with several white points in the disk beyond the middle; a white dot near the interior border in a line with the points; costa with some lurid points near the base, with two white dots beyond the middle and with five white points nearer the tip; hind border slightly dilated at somewhat in

front of the middle, adorned with several elongated white points; transverse veins forming three or four very irregular series and one exterior regular and continuous line. Hind wings with a cluster of white dots in the disk; hind border irregularly white. Length of the body 5 lines, of the wings 15 lines.

*Hab.* Morty.

167. *RICANIA CALIGINOSA*. *Fam.* Nigra, capitis marginibus rufis, fronte carinis tribus rufis, facie rufa unicarinata, thorace rufo-marginato; prothorace unicarinato; mesothorace tricarinato, pedibus pallide rufescentibus, alis nigricantibus, alis anticis venis longitudinallibus plurimis, lineis quinque e venis transversis.

*Female.* Black. Head with red and slightly prominent borders; vertex short, mostly covered by the prothorax; front nearly twice as broad as long, with three red keels; the keel on each side curved outward, not extending to the fore border; face red, with one keel. Thorax red-bordered. Prothorax arched, more than six times as broad as long, attenuated on each side, with one keel. Mesothorax long, with three keels, the keel on each side diverging hindward from the middle one. Legs pale reddish. Wings ample, blackish. Fore wings with very numerous veins; transverse veins forming five lines; of these the fourth is more regular than the three preceding, but less regular than the fifth, which is submarginal; costal transverse veins numerous, regular; a few forked marginal veins. Hind wings with a few forked marginal veins, and a few transverse veins. Length of the body  $4\frac{1}{2}$  lines, of the wings 14 lines.

*Hab.* Aru.

168. *RICANIA SIMPLEX*. *Fam.* Nigra, fronte tricarinata, facie testacea, prothorace unicarinato; mesothorace quinquecarinato, pedibus testaceis, alis anticis piceo-nigris æneo bifasciatis macula costali alba, alis posticis obscure fuscis venis marginalibus duabus furcatis.

*Female.* Black. Head piceous, with slightly prominent borders; vertex very short; front very much broader than long, rounded on each side, with three keels, the middle keel not extending to the vertex nor to the face, the keel on each side much curved, extending to the vertex, but not to the face; face testaceous. Prothorax slightly arched, four times as broad as long, with one keel, hiding part of the vertex. Mesothorax with five keels, the inner pair connected in front, the outer pair very short. Legs testaceous. Fore wings piceous black, with two æneous bands, of which one is postmedial and the other marginal; a white elongated dot on the costa beyond the middle; transverse veins irregular, excepting some which form two complete lines beyond the rest; transverse costal veins parallel, very few of them forked; apical veins forked. Hind wings dark

brown, with a few transverse veins and with two forked marginal veins. Length of the body 4 lines, of the wings 12 lines.

*Hab.* Waigiou.

This species is more nearly allied to *R. limitaris* (*Flatoides*, Cat. Hom. v. 99); but the front is dark, the disk of the fore wings is wholly dark, the costa is more rounded towards the base, and the white costal spot is much smaller.

169. *RICANIA RUFIFRONS*. *Mas.* Nigra, verticis thoracisque lateribus, fronte nisi apud apicem facieque rufis, mesothorace tricarinato, abdominis segmentis ventralibus albido marginatis, pedibus fulvis, alis anticis nigricanti-fuscis albo trimaculatis chalybeo bifasciatis, venis transversis plurimis, alis posticis fuscis subhyalinis.

*Male.* Black. Head with slightly prominent borders, vertex short, red on each side; front red, much broader than long, rounded on each side, black near the face, which is red. Thorax red on each side. Prothorax arched, hiding part of the vertex. Mesothorax long, with three keels; the keel on each side oblique, much shorter than the middle keel, with which it is connected on the fore border. Abdominal segments beneath with whitish hind borders. Legs tawny. Fore wings blackish brown, with three white spots; first and second spots costal; first at a little beyond the middle; second near the tip, elongated, oblique, much notched in the middle; third on the exterior border; two chalybeous black bands; veins very numerous; transverse veins forming four transverse lines, of which the fourth is submarginal and more regular than the others; costal transverse veins very numerous, mostly parallel; marginal veins not forked. Hind wings dark brown, slightly hyaline. Length of the body 4 lines, of the wings 13 lines.

*Hab.* Waigiou.

The red front and the single white spot on the exterior border of the fore wings distinguish it from *R. tenebrosa* (*Flatoides*, Cat. Hom. ii. 406).

170. *RICANIA SPECULARIS*. *Mas.* Nigra, fronte plana unicarinata ferrugineo marginata, facie unicarinata; mesothorace tricarinato, pedibus testaceis femoribus piceis, alis anticis macula magna costali, macula media maculisque tribus marginalibus pellucidis, margine exteriore subrecto, alis posticis nigricantibus.

*Male.* Black. Vertex extremely short; front flat, very much broader than long, much decreasing in breadth towards the base, with very minute longitudinal striæ, with a middle keel, and with slightly elevated ferruginous sides; face elongate triangular, with a middle keel. Prothorax arched, more than four times as broad as long. Mesothorax with three keels, of which two diverge from the middle,



one near the fore border. Legs testaceous; femora piceous. Fore wings with a vitreous spot in the disk, with a large vitreous costal spot beyond the middle, and with three irregular vitreous spots on the exterior border; transverse veins in the disk numerous, irregular, excepting some which form a regular and entire submarginal line; marginal veins not forked; costa and exterior border almost straight. Hind wings blackish; an irregular line of transverse veins; marginal veins not forked. Length of the body 4 lines, of the wings 15 lines.

*Hab.* Flores.

The shape of the white costal spots of the fore wings distinguish it from *R. tenebrosa* (*Flatoides*, Cat. Hom.).

171. *RICANIA FURCIFERA*. *Fæm.* Nigra, vertice ferrugineo, fronte striata, facie fulva, mesothorace tricarinato subruguloso, pectore pedibusque fulvis, abdominis segmentis albo marginatis; alis anticis cyaneo suffusis stigmatè costali albo magno, lituris decem punctisque duobus pellucidis, margine exteriore subflexo; alis posticis pellucidis fusco marginatis.

*Female.* Black. Vertex ferruginous, extremely short; front flat, very much broader than long, with numerous slight minute striæ; face tawny, triangular, a little longer than broad. Thorax very minutely rugulose. Prothorax short. Mesothorax with three keels; the keel on each side curved, united to the middle one in front, diverging from it backward. Pectus mostly tawny. Abdomen with slender white bands on the hind borders of the segments. Legs tawny. Fore wings with a chalybeous blue tinge, which is most prevalent on a depressed round mark in the disk; a large white costal stigma at somewhat beyond the middle; five large vitreous marks; first mark costal, lanceolate, beyond the stigma; second and third lanceolate, on the exterior border; fourth and fifth elongated, fourth near the base, fifth transverse in the disk; a vitreous point near the tip of the costa; transverse veins numerous, irregular, with the exception of some which are beyond nearly all the others, and form a continuous straight line; marginal veins not forked; exterior border slightly bent at one third of the length from the tip. Hind wings vitreous, with a narrow brown marginal band which does not extend to the tip; an irregular line of transverse veins; marginal veins forked. Length of the body  $5\frac{1}{2}$  lines, of the wings 14 lines.

*Hab.* Sumatra.

172. *RICANIA FENESTRATA*. *Fæm.* Nigra, fronte rugulosa apud verticem fulva, facie testacea; prothorace unicarinato; mesothorace tricarinato, pedibus testaceis, alis anticis fasciis tribus chalybeis indeterminatis, maculis quatuor costalibus, quatuor marginalibus duabus-

que mediis albis, venis transversis plurimis, alis posticis cinereis fere hyalinis venis marginalibus furcatis.

*Female.* Black. Head with hardly prominent borders; vertex very short; front minutely rugulose, twice as broad as long, tawny along the summit; face testaceous. Prothorax arched, with a slight keel, hiding most of the vertex. Mesothorax minutely punctured, with three very slight keels; the keel on each side bent, diverging hindward from the middle one. Legs testaceous. Fore wings with three irregular and incomplete chalybeous bands, with four white costal spots, with four white spots on the exterior border, and with two white spots in the disk, the one near the base, the other in the middle; transverse veins numerous, some of them forming a regular submarginal line; transverse costal veins very numerous, mostly parallel; marginal veins not forked, except two, which are near the tip. Hind wings cinereous, nearly hyaline; marginal veins forked. Length of the body 5 lines, of the wings 14 lines.

*Hab.* Tondano.

The markings of the fore wings and the more transparent hind wings distinguish it from *R. tenebrosa* and from *R. speculum*. The latter species is identical with *R. perforata* and with *R. Malaya*, Stål.

173. *RICANIA ATOMARIA.* *Mas.* Nigra, capitis lateribus fulvis, fronte tricarinata, facie picea, prothorace unicarinato, mesothorace quinquecarinato, pedibus fulvis; alis anticis fasciis quatuor indeterminatis lineaque submarginali chalybeis, maculis tribus albis (duabus costalibus, una marginali), strigulis plurimis cinereis; alis posticis fuscis, subhyalinis.

*Male.* Black. Head with tawny slightly prominent borders; vertex very short; front very much broader than long, rounded on each side, with three slight keels, which are abbreviated near the fore border, the keel on each side very remote from the middle one; face piceous. Prothorax arched, with one keel, hiding part of the vertex. Mesothorax with five keels, the inner pair of keels connected with the middle one near the fore border and diverging from it hindward, the outer pair very short. Legs tawny. Fore wings with four irregular incomplete chalybeous bands, and with a chalybeous submarginal line; three white triangular spots; first and second spots costal, first smaller than the second and with a yellowish tinge, third on the exterior border; many little cinereous transverse streaks in the outer part of the disk; transverse veins mostly forming two complete lines, which are not far from the exterior border; transverse costal veins very numerous, mostly parallel; two apical forked veins. Hind wings brown, slightly hyaline, with a few forked veins.

Var.  $\beta$ . *Male*. Fore wings with three deep-red irregular bands; no cinereous streaks. Length of the body 3 lines, of the wings 9 lines.  
*Hab.* Aru; Batehian; New Guinea; Waigiou.

Var.  $\beta$ . *Fœm.* Nigra, vertice testaceo-marginato, fronte fulvo-marginata, pedibus testaceis femoribus piceis; alis anticis strigis tribus lanceolatis albo-hyalinis, fasciis quatuor chalybeis, 3<sup>a</sup> 4<sup>a</sup>que interruptis, margine exteriore subcarinato; alis posticis nigricantibus.

*Female*. Black. Vertex with testaceous sides; front with tawny sides. Legs testaceous; femora piceous. Fore wings with three short white vitreous lanceolate streaks; first and second streaks costal, first postmedial, second subapical, third on the exterior border; four chalybeous bands; first and second bands much retracted in front, first very near the base, third much interrupted, fourth composed of marginal streaks. Hind wings blackish.

*Hab.* Morty; Mysol.

Var.  $\gamma$ . *Mas.* Nigra, facie testaceo bivittata, prothorace rufo, mesothorace rufo fasciato, tibiis piceis, tarsis fulvis, alis anticis chalybeo-nigris macula basali fascisque tribus rufis, strigis tribus albo-hyalinis, alis posticis cupreis subhyalinis.

*Male*. Black. Face with two testaceous stripes. Prothorax deep red. Mesothorax with a deep-red band near the fore border. Tibiæ piceous; tarsi tawny. Fore wings chalybeous black, with a deep-red spot at the base and with three deep-red bands, of which the third is irregular; three white hyaline streaks, first and second costal, first postmedial, second near the tip, third on the exterior border. Hind wings cupreous, slightly hyaline. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Ceram.

174. *RICANIA PUNCTICOSTA*. (*Flatoides puncticosta*, *Wlk. Journ. Ent.* i. 310.) *Mas.* Nigra, fronte bicarinata, prothorace unicarinato, mesothorace tricarinato, pedibus testaceis, alis anticis fasciis quatuor maculisque tribus chalybeis, guttis duabus costalibus albis, venis marginalibus non furcatis, alis posticis cupreo-nigris margine exteriore subchalybeo venis marginalibus nonnullis furcatis.

*Male*. Black. Head with slightly prominent borders; vertex short; front much broader than long, rounded on each side towards the face, with two curved keels, which are very remote from each other, and which do not extend to the face. Prothorax arched, about four times as broad as long, with one keel, partly hiding the vertex. Mesothorax with three keels, the keel on each side diverging hindward from the middle one. Legs testaceous. Fore wings with four chalybeous bands, third band joining the fourth near the interior angle, extending across half the breadth, with three chalybeous spots

between it and the costa, fourth marginal; two white costal dots, one beyond the middle, the other near the tip; most of the transverse veins forming two complete lines near the exterior border; costal transverse veins numerous, most of them parallel; marginal veins not forked. Hind wings cupreous black, with a chalybeous tinge along the exterior border; some of the marginal veins forked. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* Ké.

Closely allied to *R. atomaria*.

175. *RICANIA BINOTATA*. Fulva, subtus testacea, fronte carinis tribus antice connexis, prothorace unicarinato, mesothorace quinque-carinato, pedibus robustis sulcatis, alis anticis piceis basi fulvis macula costali alba obliqua, macula subapicali nigra, venis transversis plurimis, alis posticis nigricanti-cinereis.

Tawny, testaceous beneath. Head with slightly prominent borders; vertex short; front rounded on each side, much broader than long, with three slight keels, which terminate near the face in a slight transverse keel, the keel on each side curved outward; face small, not keeled. Prothorax four times as broad as long, convex and slightly elevated in front, with one keel. Mesothorax with five keels, the inner pair diverging hindward from the middle one, the outer pair much abbreviated hindward. Legs stout, short; femora and tibiae keeled. Wings broad. Fore wings piceous, tawny at the base, with very numerous veins; three lines of transverse veins; first one much bent inward; third regular, submarginal; transverse costal veins numerous, regular, one of them forked, as is also one of the marginal veins; a white oblique costal spot beyond the middle, and a round subapical black spot. Hind wings blackish cinereous, with one incomplete line of transverse veins, and with one forked marginal vein. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* New Guinea.

Var. *β*. *Mas.* Picea, fronte facieque testaceis, pedibus testaceis, alis anticis striga lata fasciaque marginali chalybeis macula costali alba, alis posticis fuscis semihyalinis.

*Male.* Piceous. Front testaceous. Face testaceous. Legs testaceous. Fore wings with a chalybeous marginal band and with a broad chalybeous streak extending from a postmedial white costal spot to the disk. Hind wings brown, semihyaline.

*Hab.* Aru.

176. *RICANIA BIMACULATA*. *Mas.* Picea, capitis lateribus testaceis, fronte tricarinata, facie testacea, prothorace unicarinato, mesothorace tricarinato, pedibus testaceis, alis anticis macula alba venis transversis plurimis, venis marginalibus non furcatis, alis posticis subpallidioribus venis marginalibus tribus furcatis.



*Male.* Piceous. Head with slightly prominent testaceous borders; vertex short; front much broader than long, rounded on each side, narrower towards the face, with three slight keels, the keel on each side very remote from the middle one; face testaceous. Prothorax arched, hiding most of the vertex, with one keel and with a transverse furrow. Mesothorax with three keels, the keel on each side diverging hindward from the middle one. Legs testaceous. Fore wings with a white spot in the disk at much beyond the middle; transverse veins numerous, less and less irregular from the first line to the last, which is submarginal; marginal veins not forked, excepting two, which are apical. Hind wings a little paler than the fore wings, with an incomplete line of transverse veins, and with three forked marginal veins. Length of the body 3 lines, of the wings 9 lines.

*Hab.* Batchian.

This species is distinguished by the few transverse veins of the fore wings, and will form a section in the genus. It is allied to *R. (Flatoides) discigutta* (Journ. Ent. i. 318).

177. *RICANIA PATULA.* *Mas.* Nigra, capite piceo, fronte tricarinata testaceo marginata, facie testacea unicarinata, prothorace piceo unicarinato, mesothorace tricarinato lateribus piceis, abdominis fascia basali pedibusque testaceis, alis anticis chalybeo suffusis venis transversis plurimis, alis posticis nigricanti-cinereis.

*Male.* Black. Head piceous; vertex short, mostly hidden by the prothorax; front very much broader than long, with testaceous and slightly elevated borders, and with three very slight keels, the keel on each side curved outward, and very remote from the middle one; face testaceous, with a middle keel. Prothorax piceous, arched, more than four times as broad as long, with a middle keel. Mesothorax piceous on each side in front, and with three keels, the keel on each side diverging from the middle one, with which it is connected on the fore border. Abdomen with a testaceous band at the base. Legs testaceous. Wings slightly hyaline. Fore wings with a chalybeous tinge; eight lines of transverse veins, of which seven lines are irregular, and the eighth nearly regular and submarginal; two apical veins forked. Hind wings blackish cinereous, with one line of transverse veins. Length of the body  $2\frac{1}{2}$  lines, of the wings 9 lines.

*Hab.* Batchian.

178. *RICANIA NIGRA.* *Fœm.* Nigra, capite ferrugineo, fronte tricarinata apice nigricante, facie prothoraceque unicarinatis, mesothorace quinquecarinato, pedibus testaceis, pedibus posticis piceo vittatis, alis obscure fuscis, alis anticis venis marginalibus furcatis.

*Female.* Black. Head ferruginous; vertex about eight times as broad as long; front much broader than long, blackish towards the face,



with three abbreviated keels, the keel on each side curved and very remote from the middle one; face keeled. Prothorax with one keel, more than four times as broad as long. Mesothorax with five keels, the keels on each side diverging from the middle one. Legs testaceous; hind legs striped with piceous. Wings dark brown, slightly translucent. Fore wings with some transverse veins in the disk, and with two exterior complete lines of transverse veins; of these the second line is more regular than the first; marginal veins forked at the tip and along the subapical part of the costa. Hind wings with one irregular line of transverse veins; some of the marginal veins forked. Length of the body 2 lines, of the wings 6 lines.

*Hab.* Morty.

179. *RICANIA IMPERVIA*. *Mas.* Nigra, capite margine testaceo carinato, vertice brevissimo, fronte transversa septemcarinata, prothorace arcuato unicarinato, scuto tricarinato, scutello unicarinato, pedibus testaceis, alis latis nigro-fuscis, alis anticis venis plurimis longitudinalibus lineisque tribus e venis transversis.

*Male.* Black. Head with a testaceous prominent border; vertex very short; front broader than long, with seven slight keels, of which the three on each side are incomplete. Prothorax arched, four times as broad as long, with one keel. Scutum of the mesothorax with three keels, the keel on each side diverging hindward from the middle one; scutellum with one keel. Legs testaceous; coxæ black. Wings broad, blackish brown, with a bluish bloom beneath. Fore wings with very numerous longitudinal veins; three lines of transverse veins, of which the first is irregular, the second is slightly undulating, and the third is nearly straight; transverse costal veins numerous, some of them forked. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Gilolo.

180. *RICANIA DENSE*. *Mas.* Nigra, fronte tricarinata piceo marginata, facie picea non carinata, prothorace unicarinato, mesothorace quinquecarinato, pectore ventrequae piceis, pedibus testaceis, alis anticis piceo-nigris venis marginalibus non furcatis, alis posticis fuscis subhyalinis.

*Male.* Black. Vertex extremely short; front very much broader than long, piceous on each side and in front, with three abbreviated keels, of which the keel on each side is slightly curved and very remote from the middle one; face piceous, not keeled. Prothorax arched, with one keel. Mesothorax with five keels, of which the inner pair diverge from the middle one hindward, and are there united to the outer pair. Pectus and abdomen beneath piceous. Legs testaceous. Fore wings

piceous black, with a few transverse veins in the disk; two regular and complete lines of transverse veins, one postmedial, the other nearer the exterior border; marginal veins not forked. Hind wings brown, semihyaline; one transverse vein; marginal veins not forked. Length of the body  $2\frac{1}{2}$  lines, of the wings 7 lines.

*Hab.* Flores.

181. *RICANIA OCULATA*, Guér. *Voy. Coquille, Atlas, Ins.* pl. 10. f. 9.—  
Flata 70, Boisd. *Voy. Astrolabe*, pl. 10. f. 14.

*Hab.* Mysol; New Guinea.

182. *RICANIA SPLENDIDA*, Guér. *Voy. Coquille, Atlas, Ins.* pl. 10. f. 10.

*Hab.* Morty; New Guinea.

183. *RICANIA VILICA*, Stål, *Trans. Ent. Soc. Lond.* 3rd ser. i. 590.

*Hab.* Aru.

184. *RICANIA CONCINNA*, Stål, *Trans. Ent. Soc. Lond.* 3rd ser. i. 590.

*Hab.* Aru.

185. *RICANIA TRINOTATA*. *Fam.* Testacea, fronte tricarinata nigro quadristrigata, facie unicarinata nigro bivittata, mesothorace quinquecarinato, alis lurido-hyalinis venis marginalibus furcatis, alis anticis fascia postmedia e maculis tribus nigricantibus, alis posticis stigmatibus nigro.

*Female.* Testaceous, a lappet on each side above the base of the wing. Vertex very short, slightly dilated on each side; front nearly twice as broad as long, rounded on each side towards the face, where it is excavated, with slightly elevated sides, with two black streaks on each side, and with three keels; of these the keel on each side is very remote from the middle one; face rather broad, with two black stripes and with one keel. Prothorax arched, about six times as broad as long. Mesothorax with five keels; the inner pair united with the middle one on the fore border, and diverging from it hindward; the outer pair short. Wings lurid, vitreous. Fore wings rounded at the tips; three blackish spots forming an incomplete postmedial band; a blackish costal stripe extending from the base to the band; a blackish marginal band; transverse veins irregular, very numerous; marginal veins mostly forked. Hind wings with one irregular line of transverse veins, with forked marginal veins and with a black costal stigma. Length of the body 4 lines, of the wings 12 lines.

*Hab.* New Guinea.

186. *RICANIA LURIDA*. *Fam.* Fulva, fronte tricarinata, prothorace unicarinato, mesothorace quinquecarinato, pedibus flavescenti-testaceis, alis anticis fuscis conspersis guttis duabus nigricantibus,

costa margineque exteriore piceis lurido notatis, costa dimidio basali valde convexo, alis posticis luridis.

*Female.* Tawny. Vertex, mostly covered by the prothorax; front twice as broad as long, with rounded and slightly elevated sides, and with three short slight keels; of these the pair are slightly curved. Prothorax slightly arched, with one keel and with a slight transverse furrow. Mesothorax with five keels, of which the inner pair diverge hindward, and the outer pair are much abbreviated. Legs yellowish testaceous. Fore wings brownish-speckled; two blackish dots in the disk near the base; costa and exterior border piceous, with various small lurid marks; four lines of transverse veins; first line bent inward; second and third irregular; fourth regular, straight; costa very convex for half the length from the base. Hind wings lurid. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* New Guinea.

It may be distinguished from *R. stigma* (Flatoides, Cat. Hom. ii. 410) by the pale stigma of the latter.

187. *RICANIA BICINCTA*. *Fæm.* Fulva, fronte tricarinata, prothorace tricarinato, pedibus testaceo-flavescentibus, alis lurido-hyalinis, alis anticis margine fasciæque undulata abbreviata ferrugineis, venis transversis plurimis, venis marginalibus furcatis.

*Female.* Tawny. Vertex short, nearly hidden by the prothorax; front twice as broad as long, with parallel and slightly elevated sides, and with three keels, of which the pair are indistinct. Prothorax arched, a curved keel on each side, joining the middle keel near the fore border. Mesothorax with five keels; inner pair diverging, very near the middle one in front; outer pair bent, abbreviated. Legs testaceous yellowish. Wings vitreous, with a lurid tinge; veins tawny. Fore wings rounded, wholly ferruginous-bordered, excepting a short space near the end of the costa; an undulating postmedial ferruginous band, which is abbreviated near the interior border; transverse veins very numerous, irregular; marginal veins forked. Hind wings with three of the marginal veins forked. Length of the body 3 lines, of the wings 9 lines.

*Hab.* Morty.

188. *RICANIA SUBAPICALIS*. *Mas.* Testacea, fronte carinis tribus antice connexis, facie non carinata, prothorace unicarinato, mesothorace quinquemarginato, alis pellucidis venis testaceis, alis anticis costa dilatata testacea strigam plagamque subapicalem nigram includente, macula apicali nigricante, alis posticis margine exteriore fuscescente.

*Male.* Testaceous. Vertex mostly covered by the prothorax; front much broader than long, with slightly elevated borders, and with three

slight keels, which terminate near the face in a transverse keel; face not keeled. Prothorax arched, with a slight keel. Mesothorax with five keels, the inner pair diverging from the middle one hindward, where they are united with the outer pair. Wings vitreous; veins testaceous. Fore wings with the costal space dilated, and furnished with very numerous transverse veins; two irregular lines of transverse veins; first line widely interrupted; an exterior regular and complete line of transverse veins; marginal veins not forked; costal space testaceous, with a broad longitudinal brown streak, with an exterior brown patch, and with a black round subapical spot; a blackish apical spot, space along the exterior border broadly and diffusedly brownish. Hind wings with a brownish tinge along the exterior border; one irregular line of transverse veins; three forked marginal veins. Length of the body  $3\frac{1}{2}$  lines; of the wings 10 lines.

*Hab.* Aru.

189. *RICANIA ALBIPES*. *Fœm.* Fusca, subtus testacea, capite testaceo-marginato, fronte unicarinata, facie testacea lateribus fuscis, prothorace marginibus carinaque testaceis, mesothorace carinis tribus testaceis, alis pellucidis, alis anticis vitta costali interrupta, fascia antemediæ fasciæque marginali fuscis puncta pellucida includentibus, lineis quatuor e venis transversis, 1<sup>a</sup> 2<sup>a</sup>que fusco nebulosis, alis posticis fascia fusca marginali.

*Female.* Brown, testaceous beneath. Head with testaceous slightly prominent borders; vertex mostly covered by the prothorax; front much broader than long, with slightly rounded borders and with one keel; face triangular, testaceous, brown on each side. Prothorax testaceous-bordered, slightly arched, with a testaceous keel. Mesothorax with three testaceous keels, the keel on each side diverging from the middle one. Wings hyaline, colourless. Fore wings with a brown twice interrupted costal stripe, a brown entire marginal band, and a brown band near the base; four lines of transverse veins, 1st and 2nd clouded with brown, 3rd and 4th in the marginal band; some hyaline colourless points along the costa and the exterior border. Hind wings with a brown marginal band, and with one line of transverse veins. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* Batchian.

Most allied to *R. spatiosa*, but very different in the markings of the fore wings.

*Var. β.* *Fœm.* Testacea, frontis margine antico piceo, prothorace albido, femoribus posticis piceis, alis anticis vitta costali fasciisque tribus fuscis guttas pellucidas includentibus, alis posticis fascia fusca marginali.

*Female.* Testaceous. Vertex with a piceous fore border. Prothorax whitish. Hind femora piceous. Wings vitreous. Fore wings with

an irregular brown costal stripe, which contains four little vitreous streaks near the base, three antemedial vitreous dots, and three sub-apical vitreous dots; two irregular brown bands, one near the base, the other on the first line of transverse veins; veins of the second line clouded with brown; a marginal brown band, which includes a row of marginal vitreous dots. Hind wings with a brown marginal band. Length of the body 3 lines, of the wings 9 lines.

*Hab.* Sula.

Var.  $\gamma$ . *Mas.* Nigricans, fronte testaceo marginata, facie testacea, prothorace, pectore, abdomineque piceis, pedibus albidis tibiis apice tarsisque piceis, alis pellucidis, alis anticis vitta costali bis interrupta fascisque tribus indeterminatis fuscis guttas pellucidas includentibus, alis posticis fascia fusca marginali.

*Male.* Blackish. Front with testaceous sides; face testaceous. Prothorax piceous. Pectus and abdomen piceous. Legs whitish; tarsi and tips of the tibiae piceous. Wings vitreous. Fore wings with three lines of transverse veins; first and second lines irregular, clouded with brown; third regular, submarginal, partly double; an irregular brown costal stripe, which is twice interrupted, and forms a patch at rather beyond the middle, and contains some little vitreous marks; two very incomplete and irregular brown bands; a marginal brown band, which includes a row of marginal vitreous dots. Hind wings with a brown marginal band. Length of the body 3 lines, of the wings 9 lines.

*Hab.* Morty.

190. *RICANIA VARIA.* *Mas.* Nigra, fronte tricarinata, facie fulva, prothorace unicarinato; mesothorace tricarinato, pedibus testaceis femoribus nigris, alis anticis nigricantibus strigis costalibus lanceolatis, plagis quinque guttisque marginalibus pellucidis, alis posticis nigricantincinereis.

*Male.* Black. Vertex very short, almost hidden by the prothorax; front very much broader than long, with a slightly elevated border and with three slight keels; the keel on each side curved outward, very remote from the middle one; face tawny, triangular. Prothorax arched, six times as broad as long, with a middle keel. Mesothorax with three keels; the keel on each side connected with the middle one on the fore border, and diverging from it hindward. Legs testaceous; femora black. Fore wings blackish; some transverse lanceolate vitreous costal streaks; a vitreous patch on the middle of the costa; an oblique interrupted band composed of four vitreous patches; marginal dots vitreous, two near the tip elongated and of large size; three lines of transverse veins, first and second irregular, first bent inward, third regular; marginal veins not forked, excepting one which is apical. Hind wings blackish cinereous; an irregular line of transverse veins; three forked marginal veins, first and second with



long forks, third (apical) with a short fork. Length of the body 2 lines, of the wings 6 lines.

*Hab.* Flores.

191. *RICANIA APERTA*. *Mas.* Nigra, capitis lateribus fulvis, fronte tricarinata lateribus fulvis, prothorace carina marginibusque fulvis, mesothorace tricarinato, abdominis fascia basali pedibusque pallide flavescentibus, tarsis nigricantibus, alis pellucidis guttis marginalibus fuscis, alis anticis plagis tribus costalibus nigricantibus strigas pellucidas includentibus, venis transversis fusco nebulosis.

*Male.* Black. Head tawny on each side; vertex short, with an elevated border, nearly hidden by the prothorax; front much broader than long, with tawny elevated sides, and with three slight abbreviated keels, of which two are very remote from the middle one. Prothorax arched, fully twice as broad as long, tawny-bordered, and with a tawny keel. Mesothorax with three keels; one on each side diverges hindward from the middle one. Abdomen with a pale yellowish band at the base. Legs pale yellowish; tarsi blackish. Wings vitreous. Fore wings broad, with three blackish costal patches, which include little vitreous transverse streaks; four irregular lines of transverse veins, which are more or less clouded with brown; transverse costal veins between the first patch and the second pale yellow; exterior border with brown dots; marginal veins not forked. Hind wings with one irregular line of transverse veins, and with brown marginal dots. Length of the body 3 lines, of the wings 10 lines.

*Hab.* Batchian.

The marginal dots of the fore wings distinguish it from *R. consobrina*.

192. *RICANIA VIRIDICOLLIS*. *Fem.* Testacea, fronte tricarinata, prothorace viridi, mesothorace quinquecarinato, pedibus albidotestaceis, alis pellucidis, alis anticis vitta costali ferruginea basi fusca, macula costali fusca punctum pellucidum includente, fascia marginali fusca puncta pellucida includente, litura basali viridi, alis posticis fascia marginali tenui fusca.

*Female.* Testaceous. Vertex extremely short; front much broader than long, with slightly rounded and elevated sides, and with three slight abbreviated keels, of which the lateral pair are curved. Prothorax bright pale green, very short. Mesothorax with five keels; the inner pair connected with the middle one near the fore border, and diverging from it hindward; the outer pair short, oblique. Legs whitish testaceous. Wings vitreous. Fore wings with three lines of transverse veins; first and second lines irregular, clouded with ferruginous; third regular, submarginal; a ferruginous costal stripe, brown towards the base, interrupted by a brown spot, which contains

a vitreous point, and is opposite the first line of transverse veins; a brown marginal band, which is bordered on the inner side by a darker brown line, and contains a row of marginal vitreous points; a small bright pale green mark on the veins at the base, near the interior border. Hind wings with a narrow brown marginal band. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* Sula.

193. *RICANIA SPATIOSA*. *Fam.* Testacea, fronte tricarinata, facie unicarinata, prothorace albedo guttis duabus margineque postico viridibus, mesothorace tricarinato disco ochraceo, alis pellucidis, alis anticis lineis tribus transversis e venis fulvo nebulosis, linea submarginali transversa e venis nigricante nebulosis, costa fulvescente, stigmatibus nigricante. *Var. β.* Prothorace lituris nullis viridibus, alis anticis venis transversis fusco nebulosis fascia marginali fusca.

*Female.* Testaceous. Vertex very short; front much broader than long, with slightly elevated sides, and with three abbreviated keels, of which the keel on each side is very remote from the middle one; face triangular, with one keel. Prothorax whitish, arched, with a bright green dot on each side in front, and with a bright green hind border. Mesothorax with three keels, the keel on each side connected with the middle one in front, and diverging from it hindward; disk ochraceous. Wings vitreous. Fore wings with three irregular lines of tawny-clouded transverse veins; first line very incomplete; a submarginal regular incomplete line of blackish-clouded transverse veins; exterior border, opposite the submarginal line, and costa with a tawny tinge; costal stigma blackish; marginal veins not forked. Hind wings with one incomplete line of transverse veins; marginal veins forked. Length of the body  $2\frac{1}{2}$  lines, of the wings 9 lines.

*Hab.* Mysol.

*Var. β.* Prothorax wholly whitish. Fore wings with the transverse veins in the first, second, and third lines clouded with brown; an incomplete brown marginal band.

*Hab.* New Guinea.

Most allied to *R. viridicollis*, from which it may be distinguished by the colour of the body and by the irregular marginal band of the fore wings.

194. *RICANIA DIVISURA*. *Mas.* Testacea, fronte tricarinata, facie non carinata, prothorace albedo unicarinato, mesothorace quinque-carinato, pedibus pallide testaceis, alis pellucidis, alis anticis vitta costali fulva albedo strigata stigmatibus lineaque marginali obscure fuscis, venis transversis fusco nebulosis, alis posticis plaga postica lineaque marginali fuscis. *Var. β.* Alis anticis venis transversis non nebulosis

linea marginali punctulari, alis posticis plaga obsoleta. Var.  $\gamma$ . Prothorace pallide viridi, alis anticis linea marginali tenuissima, alis posticis plaga vix conspicua.

*Male*. Testaceous. Vertex very short; front very much broader than long, with a slightly elevated border, and with three slight keels; the keel on each side abbreviated, slightly curved, very remote from the middle one; face not keeled. Prothorax whitish, short, arched, with one keel. Mesothorax with five keels, the inner pair diverging hindward from the middle one. Legs pale testaceous. Wings vitreous. Fore wings with three irregular lines of transverse veins, which are bordered with brown; a tawny, transversely whitish-streaked costal stripe extending from the base to the stigma, which is dark brown, and opposite the second line, and is nearly connected with a dark-brown marginal line, which extends round the tip to the hind part of the exterior border and includes a regular submarginal line of transverse veins; two forked apical veins. Hind wings with an irregular line of transverse veins, with a brown patch by the interior angle, and with a brown line along the exterior border.

Var.  $\beta$ . Transverse veins of the fore wings not clouded; marginal line represented by points. Hind wings with no brown patch. Var.  $\gamma$ . Prothorax pale green. Fore wings with the marginal line much more slender, except at the tip. Hind wings with the patch on the interior angle almost wanting. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab*. New Guinea; Ké.

The additional line of transverse veins on the fore wings sufficiently distinguishes it from *R. viridicollis*.

Var.  $\beta$ . *Mas*. Fulva; prothorace viridi-albido; mesothoracis disco nigricante, alis pellucidis, alis anticis vena costali pallide fusca, striga apicali fusca guttas duas pellucidas includente, stigmatate nigricante.

*Male*. Tawny. Prothorax greenish whitish. Mesothorax with a blackish disk. Wings vitreous. Fore wings with a pale brown costal stripe, which is interrupted by the blackish stigma; a brown apical streak, including two vitreous dots. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab*. Gilolo.

195. *RICANIA BASIGERA*. *Mas*. Testacea, fronte tricarinata antice nigra, facie non carinata, prothorace pallide viridi unicarinata, mesothorace tricarinato, abdominis segmentis quatuor nigro marginatis, alis pellucidis venis marginalibus non furcatis, alis anticis lineis quatuor e venis transversis (1<sup>a</sup> nigro nebulosa), vitta costali testacea strigam fuscam includente, stigmatate maculaque apicali nigricantibus, alis posticis plaga postica fusca.

*Male.* Testaceous. Vertex nearly covered by the prothorax; front much broader than long, with a black band on the fore border, and with three slight keels; face not keeled. Prothorax arched, pale green, four times as broad as long, with one keel. Mesothorax with three keels, the keel on each side diverging hindward from the middle one. Abdomen with a short black band on the hind border of each segment from the first to the fourth. Wings vitreous; veins black; marginal veins not forked. Fore wings with four irregular lines of transverse veins; first and second lines incomplete, first clouded with black; third and fourth incomplete, fourth more regular than the others; a testaceous costal stripe, which is interrupted by a brown streak near the base, and by a blackish stigma; a blackish apical spot. Hind wings with one irregular line of transverse veins, and with a small brown patch by the interior angle. Length of the body 3 lines, of the wings 9 lines.

*Hab.* Amboina.

The last line of transverse veins of the fore wings distinguishes it from *R. divisura*, to which it has most resemblance.

196. *RICANIA CONSOBRINA.* *Fœm.* Testacea, fronte tricarinata, prothorace albido, mesothorace tricarinato, pedibus albido-testaceis, alis pellucidis, alis anticis venis transversis ferrugineo nebulosis, vitta costali testacea, maculis duabus costalibus fuscis, guttis apicalibus ferrugineis, alis posticis margine postico sublurido.

*Female.* Testaceous. Vertex extremely short; front much broader than long, with nearly straight and slightly elevated sides, and with three slight keels, of which the lateral pair are curved and abbreviated. Prothorax whitish, very short. Mesothorax with three keels, of which the lateral pair are connected with the middle one near the fore border, and diverge from it hindward. Legs whitish testaceous. Wings vitreous. Fore wings with three irregular lines of ferruginous-clouded transverse veins, first and second lines more irregular than the third; a few brown-clouded transverse veins near the base; a testaceous costal stripe, interrupted by two dark-brown spots; of these one is postmedial and the other apical; a row of ferruginous dots on the veins along the exterior border. Hind wings with a lurid tinge along the hind border. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Gilolo; Batchian.

197. *RICANIA COLLIGATA.* *Fœm.* Lutea, capitis lateribus vix carinatis, vertice brevissimo, fronte tricarinata nigro-unifasciata, prothorace albido unicarinato, mesothorace tricarinato maculis duabus elongatis albidis, alis amplis nigro-venosis, alis anticis lincis quatuor

e venis transversis, linea 1<sup>a</sup> venisque marginalibus apice nigro-nebulosis.

*Female.* Luteous. Head with very slightly prominent borders; vertex very short; front nearly twice as broad as long, rounded on each side, with a black band on the fore border, and with three slight keels, which do not extend to the face. Prothorax whitish, arched, with one keel. Mesothorax with a whitish elongated spot on each side, and with three keels, the keel on each side diverging hindward from the middle one. Wings ample, with black veins. Fore wings with four lines of transverse veins; first line clouded with black; second slightly, and partly clouded with brown; tips of marginal veins clouded with black; costa luteous, with black spots, one beyond the middle, the other at the tip. Hind wings with two transverse veins. Length of the body  $2\frac{1}{2}$  lines, of the wings 9 lines.

*Hab.* Ceram.

198. *RICANIA LATIPENNIS.* *Fam.* Testacea, fronte tricarinata, facie non carinata, prothorace unicarinato, mesothorace tricarinato, abdomine lituris nigris nonnunquam obsoletis trivittato, alis latis pellucidis linea marginali nigra, alis anticis vitta costali testacea nigricante nebulosa lineis tribus e venis transversis, 1<sup>a</sup> nigro nebulosa, venis marginalibus non furcatis, alis posticis plaga postica fusca.

*Female.* Testaceous; vertex very short; front very much broader than long, with slightly elevated borders, and with three slight keels; the keel on each side abbreviated, slightly curved, and very remote from the middle one; face triangular, not keeled. Prothorax short, arched, with a slight keel. Mesothorax with three keels, the keel on each side diverging from the middle one, with which it is united on the fore border. Abdomen with three rows of black marks, which are sometimes obsolete. Wings vitreous, broad, with a black marginal line. Fore wings with three irregular lines of transverse veins; first line clouded with black; marginal veins not forked; a testaceous costal stripe, which is shaded with blackish near the base and on the stigma and towards the tip. Hind wings with one irregular line of transverse veins; a brown patch on the interior angle. Length of the body  $3-3\frac{1}{2}$  lines, of the wings 9-10.

*Hab.* Aru; Batchian.

The clouded transverse veins and the marginal band of the fore wings distinguish it from *R. emarginata*.

199. *RICANIA EMARGINATA.* *Mas.* Testacea, fronte quinquecarinata, mesothorace tricarinato, pedibus pallide testaceis, tibiis posticis apice nigricantibus, tarsis posticis ferrugineis, alis pellucidis, alis anticis macula costali guttam nigricantem includente maculaque apicali fuscis.

*Male.* Testaceous. Vertex extremely short; front much broader than



long, with hardly curved and slightly elevated sides, and with five keels, of which the two on each side are slight and incomplete. Prothorax short, arched; mesothorax with three keels, of which the lateral pair are connected with the middle one near the fore border, and diverge from it hindward. Legs pale testaceous; hind tibiæ with blackish tips; hind tarsi ferruginous. Wings vitreous. Fore wings with three irregular lines of transverse veins; first and second lines more irregular than the third; a few brown-clouded transverse veins near the base; a brown postmedial costal spot, including a blackish dot; a brown apical spot. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Sula.

200. *RICANIA HUMERALIS*. *Fæm.* Testacea, fronte tricarinata, facie non carinata, mesothorace tricarinato, alis cinereo-hyalinis, alis anticis vitta costali ferruginea abbreviata apice nigricante stigmatè pallide testaceo, venis fulvis, venis transversis nigricantibus, alis posticis venis marginalibus furcatis.

*Female.* Testaceous. Vertex and front with the sides slightly elevated; vertex very short; front nearly twice as broad as long, with three slight abbreviated keels, the keel on each side very remote from the middle one; face not keeled. Prothorax arched, four times as broad as long. Mesothorax with three keels, the keel on each side connected with the middle one in front, and diverging from it hindward. Wings cinereous vitreous. Fore wings with an abbreviated irregular ferruginous costal stripe, which is blackish towards its tip, and is interrupted by a large pale testaceous stigma; veins tawny; transverse veins blackish, forming about ten irregular transverse lines; marginal veins not forked. Hind wings with two lines of transverse veins; first line with only two veins, second incomplete; three marginal veins forked. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Mysol.

201. *RICANIA CONSENTANEA*. *Mas.* Testacea, fronte unicarinata, facie non carinata, mesothorace tricarinato, alis anticis ochraceo marginatis venis transversis plurimis margine exteriore recto non obliquo, alis posticis albidis.

*Male.* Testaceous. Vertex short; front a little longer than broad, slightly rounded on each side, with one keel; face not keeled. Prothorax much arched, hiding most of the vertex. Mesothorax with three keels, the keel on each side slightly curved. Fore wings ochraceous along the costa and along the exterior border, tuberculate at the base and along most of the length of the interior border; transverse veins most numerous beyond the middle, where they form five irregular lines; marginal veins mostly forked; costal space with numerous regular transverse veins; exterior border straight, not oblique.

Hind wings whitish, with one incomplete line of transverse veins.  
Length of the body 3 lines, of the wings 9 lines.

*Hab.* Mysol.

202. *RICANIA ANTICA*. *Mas.* Testacea, fronte tricarinata, facie unicarinata, prothorace non carinato, mesothorace tricarinato, abdomine rufo, alis anticis piceis venis transversis plurimis, venis marginalibus nonnullis furcatis, alis posticis obscure purpurascensibus vena marginali una furcata.

*Male.* Testaceous. Vertex blending with the front, very short; front hardly broader than long, with a prominent border, and with three keels, the keel on each side very indistinct; face slightly keeled. Prothorax arched, nearly four times as broad as long, not keeled. Mesothorax with three slight keels, the keel on each side nearly parallel to the middle one. Abdomen red. Fore wings piceous, with about eight irregular lines of transverse veins, and with a regular submarginal line of transverse veins; some of the marginal veins forked. Hind wings dark purplish, with one irregular incomplete line of transverse veins, and with one forked marginal vein. Length of the body 3 lines, of the wings 9 lines.

*Hab.* New Guinea.

This species will form a section in the genus.

203. *RICANIA CRIBRATA*. *Fæm.* Testacea, fronte tricarinata, facie non carinata, prothorace tricarinato antice viridescens, mesothorace quinquecarinato, alis subcinereo-hyalinis, alis anticis venis transversis plurimis fusco nebulosis, venis marginalibus non furcatis, lituris subcostalibus punctoque subapicali fuscis, alis posticis venis marginalibus duabus furcatis.

*Female.* Testaceous. Vertex extremely short; front very much broader than long, with slightly prominent borders, and with three slight abbreviated keels, of which the keel on each side is curved, and is very remote from the middle one; face not keeled. Prothorax short, slightly arched; pale green in front, with three keels. Mesothorax with five keels, the inner pair diverging from the middle one backward, where they are connected with the outer pair. Wings vitreous, slightly cinereous. Fore wings with several irregular and, in some cases, incomplete lines of transverse veins, which are clouded with brown; one line in the disk more regular than the others, and much curved inward; marginal veins not forked; several brown points along the costa, where the transverse veins are regular; a small brown dot very near the tip. Hind wings with one line of transverse veins and with two forked marginal veins. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* Mysol.

Gen. POCHAZIA, *Amyot et Serv.*

204. POCHAZIA FUMATA. See vol. i. p. 91.

*Hab.* Sumatra. Inhabits also Malacca, Singapore, and Java.

205. POCHAZIA CONTIGUA. *Mas.* Nigra, capite testaceo-unifasciato lateribus subcarinatis, fronte tricarinata subrugulosa testaceo ex parte marginata, prothorace unicarinato, mesothorace quinquecarinato, alis anticis longis lineis duabus obliquis e venis transversis, alis posticis fuscis.

*Male.* Black. Head with slightly prominent borders, and with a narrow testaceous band between the eyes; vertex very short; front slightly rugulose, almost twice as broad as long, narrower in front, with rounded and partly testaceous borders, and with three short keels, of which the keel on each side is curved outward; face small, not keeled. Prothorax slightly arched, four times as broad as long, with one keel. Mesothorax with five keels, the two keels on each side diverging hindward from the middle one, connected near the hind border. Fore wings long, with two regular oblique lines of transverse veins—one beyond the middle, the other submarginal; some of the marginal veins forked. Hind wings brown, with an incomplete line of transverse veins, and with some forked marginal veins. Length of the body 4 lines, of the wings 16 lines.

*Hab.* Batchian; Ternate.

It may be distinguished from *P. fumata* by the fore wings, which are not falcate, and from *P. obscura* and *P. trianguli* by having no white costal point.

206. POCHAZIA INCLYTA. *Mas et Fem.* Nigra, alis fascia obliqua punctisque marginalibus albis; alis anticis puncto costali postmedio albo.

*Male and Female.* Black. In structure like *P. contigua*. Head wholly black. Wings with an oblique white band, which in the fore wings is abruptly narrower towards the costa, which it does not reach; apical border with white points, of which three in the fore wings are larger than the others. Fore wings with a white costal point beyond the middle; many transverse veins in the disk besides the two oblique lines. Length of the body 4 lines, of the wings 18 lines.

*Hab.* Makian; Celebes.

The white band is irregular towards the costa of the fore wings; and it differs also from *P. fasciata* in having a white costal point and some white marginal points.

Gen. NOGODINA, *Stål, Hem. Ap.* iv. 220.

Mindura, *Stål.*; Miriza, *Stål.*

207. *NOGODINA SIGNATIFRONS*. *Mas*. Picea, capite, thorace, abdomine subtus pedibusque fulvis, fronte tricarinata nigro guttata punctata et bivittata, mesothorace tricarinato piceo-bivittato, alis anticis litura costali lurida strigaeque alba contiguus, venis transversis plurimis, alis posticis luridis fusco late marginatis.

*Male*. Piceous. Head, thorax, abdomen beneath, and legs tawny. Vertex slightly dilated on each side, four times as broad as long, with prominent borders; front nearly twice as long as broad, with three keels, of which the middle one is short and slight, and the pair converge towards the face; sides prominent, slightly rounded in front; space between the keels and the border adorned on each side with a line of black dots, with an exterior line of black points, and with a more exterior black stripe; face with three keels, the middle one much more prominent than the lateral pair, which are curved. Prothorax much arched. Mesothorax with an irregular piceous stripe on each side, and with three keels, of which the lateral pair are diverging and bent. Fore wings with very numerous transverse veins, of which the submarginal line is regular and continuous; a small lurid costal mark contiguous to a little white streak, which is connected with a slightly undulating ridge of transverse veins. Hind wings lurid, broadly bordered with brown. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab*. New Guinea.

It is closely allied to *N. guttifrons*; but the costa of the fore wings is more rounded near the base.

208. *NOGODINA GUTTIFRONS*. *Mas et Fæm*. Picea, capite, pectore pedibusque testaceis, fronte bicarinata piceo guttata, thorace tricarinato, abdomine subtus testaceo-bivittato, alis anticis lituris nonnullis luridis stigmatibus albidis subquadrato, venis transversis plurimis, alis posticis cinereis piceo late marginatis.

*Male and Female*. Piceous. Head, pectus, and legs testaceous. Vertex very short, slightly dilated on each side, with a prominent border; front nearly twice as long as broad, with a slightly prominent border, slightly contracted in the middle, with two keels, which converge towards the base, with two lines of piceous dots along the outer side of the keels, and with many more exterior points; face with a keel and with prominent borders. Thorax with a middle keel, and with a short curved diverging keel on each side. Abdomen beneath with a broad testaceous stripe on each side. Fore wings with very numerous transverse veins; a few small lurid marks in the disk; a subquadrate whitish costal stigma, which joins a slightly undulating ridge, the latter composed of transverse veins; a whitish point very near the tip; marginal veins mostly forked; costal transverse veins numerous,

regular, oblique. Hind wings cinereous, with a broad piceous border.

Length of the body 5 lines, of the wings 14 lines.

*Hab.* Sula; Batchian; Morty; New Guinea; Ceram.

209. *NOGODINA STRICTIFASCIA*. *Mas.* Fulva, subtus testacea, fronte tricarinata nigro triguttata, facie unicarinata, prothorace carinis duabus lateralibus nigricantibus carina media sulcata, mesothorace quinque-carinato vittis quatuor piceis, alis lurido-hyalinis, alis anticis vitta costali ferruginea, fascia postice coarctata fasciaque marginali fuscis, stigmatibus nigricante lituram testaceam includente, alis posticis venis marginalibus furcatis.

*Male.* Tawny, testaceous beneath. Head obliquely prominent on each side beyond the eye; vertex arched, six times as broad as long, with an elevated border; front twice as long as broad, with three black dots at its summit, with an elevated border, and with three keels; of these the middle one is short, and is much more slight than the other two, which converge from the vertex to the face; face with one keel. Prothorax short, much arched, with a middle grooved keel, and with a diverging blackish ridge on each side. Mesothorax with four piceous stripes, and with five keels; inner pair of keels diverging from the middle one near the fore border, and joining the outer pair hindwards. Wings lurid vitreous. Fore wings with a ferruginous costal stripe, which extends from the base to a blackish stigma containing a testaceous mark, and connected with a brown band which is much contracted towards the interior border; a brown marginal band; transverse veins very numerous, forming eight or nine lines, of which the submarginal line only is regular; eight marginal veins, forked. Hind wings with one irregular line of transverse veins; marginal veins forked. Length of the body four lines, of the wings 11 lines.

*Hab.* New Guinea.

210. *NOGODINA SUBGUTTATA*, *Cat. Hom.* v. 105 (Ricania).

*Var. Mas.* Fulva, capite nigro-biguttato, vertice linea transversa nigra, fronte bicarinata piceo bilineata nigro marginata, facie et prothorace unicarinatis, mesothorace tricarinato nigricante bilineato, abdomine ochraceo segmentis piceo marginatis, alis anticis lurido-cinereis striga transversa postmedia nigricante, linea subcostali e guttis fuscis, fasciis duabus fuscis, plaga costali nigricante, alis posticis cinereis fascia marginali fusca.

*Male.* Tawny. Head with prominent borders; a black dot on each side above the eye; vertex concave, with an incomplete black line on its fore border; front nearly twice as long as broad, slightly rounded on each side towards the face, with two keels, which are united near the face, with two exterior piceous lines, and with black borders;



face with one keel. Prothorax with one keel, much arched, hiding part of the vertex. Mesothorax with three keels; the keel on each side curved, with an incomplete blackish line on its outer side; a small blackish streak near the base of the fore wing. Abdomen ochraceous, with a piceous band on the hind border of each segment. Fore wings lurid cinereous, with many irregular transverse veins, which are most numerous beyond a postmedial transverse blackish streak, which extends across half the breadth from the costa; a subcostal line of various-sized brown dots, of which the last is behind a blackish costal patch; two brown bands, one submarginal, the other marginal, the former more incomplete than the latter; submarginal line of transverse veins regular; transverse costal veins numerous, parallel; marginal veins mostly forked. Hind wings cinereous, with an incomplete brown marginal band; transverse veins mostly forked. Length of the body  $4\frac{1}{2}$  lines, of the wings 12 lines.

*Hab.* Celebes.

211. *NOGODINA INVARIA*. *Mas.* Fulva, vertice nigro-binotato, fronte subsulcata unicarinata, prothorace unicarinato lateribus subrugulosis, mesothorace tricarinato, alis venis marginalibus furcatis, alis anticis strigis duabus costalibus pallidis venis transversis plurimis, alis posticis pallidioribus.

*Male.* Tawny. Head with prominent borders, black and angular on each side of the fore border of the vertex; front very much longer than broad, slightly furrowed, and with a short keel in the middle, slightly rounded on each side towards the face. Prothorax much arched, hiding most of the vertex, keeled in the middle, slightly rugulose on each side. Mesothorax with three keels, the keel on each side curved and more conspicuous than the middle one, with which it is connected on the fore border. Fore wings with many transverse veins, which are most numerous towards the exterior border, and form a regular submarginal line; marginal veins mostly forked; costal space with numerous parallel transverse veins, and with two paler streaks, of which one is beyond the middle and the other near the tips. Hind wings paler, with an incomplete line of transverse veins; marginal veins with long forks. Length of the body  $4\frac{1}{2}$  lines, of the wings 12 lines.

*Hab.* Sula.

212. *NOGODINA CONCOLOR*. *Mas.* Fulva, subtus testacea, fronte tricarinata nigro marginata et biguttata piceo bistrigata carinis marginalibus nigris, facie carina rufescente, mesothorace tricarinato disco strigisque quatuor piceis, alis lurido-hyalinis venis marginalibus furcatis, alis anticis stigmatibus fusco albido-notato venis transversis plurimis.

*Male.* Tawny, testaceous beneath. Head forming an oblique angle on

each side between the eyes; vertex arched, six times as broad as long; front nearly twice as long as broad, slightly rounded towards the face, with black and slightly elevated sides, with an elongated black dot on each side of the summit, with a piceous streak on each side, near the face, and with three keels; of these the middle one is abbreviated, and is more slight than the others, which are black and converge from the summit to the face; face with a reddish keel. Prothorax much arched. Mesothorax with a piceous disk, and with two piceous streaks on each side; three keels, of which two are curved and enclose an elliptical space. Wings lurid vitreous, with tawny veins. Fore wings with a brown whitish-marked costal stigma, and with eight lines of transverse veins; the lines are all irregular except the eighth, which is submarginal; marginal veins forked. Hind wings with one irregular line of transverse veins, and with forked marginal veins. Length of the body  $5\frac{1}{2}$  lines, of the wings 14 lines.

*Hab.* Morty.

213. *NOGODINA SUBLINEATA*. *Fœm.* Testacea, vertice lituris quatuor nigris, fronte nigro octonotata lateribus carinisque duabus ferrugineis, carinis duabus intermediis parvis, lineis duabus guttularibus duabusque punctularibus nigris, facie tricarinata, prothorace fascia guttulari nigra, mesothorace tricarinato nigro sexnotato, alis anticis pellucidis stigmatibus nigricantibus, lituris duabus costalibus, lituris duabus mediis fasciæque marginali indeterminata fuscis, lineis septem fusco nebulosis e venis transversis, alis posticis fusco marginatis.

*Female.* Testaceous. Vertex four times as broad as long, with two small black marks on each side, where it is slightly dilated and elevated; front twice as long as broad, with two ferruginous keels, which have a short keel between them, and converge towards the face, near which they are united, and with elevated ferruginous sides, which are rounded towards the face; three black spots on each side; first pair elongated, with a smaller black spot between them; third smaller than the second, partly on the face; a row of black dots and another of black points on each side; face with three keels, black towards the tip. Prothorax much arched, with an interrupted band of partly connected black dots. Mesothorax with three elongated black marks on each side, and with three keels, of which the curved pair are connected with the middle one in front and diverge from it hindward. Pectus with some small black marks on each side. Femora with a brown band near the tips; tibiæ with a brown band near the base. Wings vitreous. Fore wings with an elongated blackish costal stigma, which contains a yellowish mark; a small brown costal mark near the base, opposite a smaller brown mark in the disk; a brown very incomplete marginal band; seven partly brown-clouded lines of transverse veins; third and seventh lines regular,

the latter submarginal; marginal veins forked. Hind wings with a very narrow brown marginal band; one line of transverse veins; marginal veins forked. Length of the body 5-5½ lines, of the wings 15-16 lines.

*Hab.* Sula; Celebes.

214. *NOGODINA DECISA*. *Mas.* Testacea, vertice nigro-bimaculato, fronte carinis duabus lateribusque ferrugineis maculis duabus annulisque duobus nigris, facie carinata nigro bivittata, prothorace nigro-bivittata, mesothorace strigis octo nigris, pectore guttis octo nigris, abdominis segmentis nigro marginatis, alis pellucidis, alis anticis stigmatibus nigro elongato lituram flavescentem includente, fascia marginali fusca guttas pellucas includente, alis posticis fascia marginali tenui fusca.

*Male.* Testaceous. Vertex four times as broad as long, with a black spot on each side, where it is dilated, and has an elevated edge; front very much longer than broad, with two ferruginous keels which converge towards the face, near which they are united, and with elevated ferruginous sides, which are rounded in front; two exterior black spots, which join the spots on the vertex; an elliptical, sometimes incomplete, black ringlet on each side near the face; the latter black towards the tip, and with a black stripe on each side of its keel. Prothorax much arched, with two black stripes. Mesothorax with eight elongated black marks, four on each side. Pectus with four black dots on each side. Hind borders of the abdominal segments black. Wings vitreous. Fore wings with an elongated black costal stigma, which contains a yellowish mark; a brown marginal band, including along its inner side some vitreous dots; five lines of transverse veins; first, third, and fourth lines irregular; second more continuous but less regular than the fifth, which is submarginal; costa slightly rounded; exterior border convex. Hind wings with a narrow brown marginal band; one line of transverse veins; marginal veins forked. Length of the body 4½ lines, of the wings 13 lines.

*Hab.* Mysol; Aru; New Guinea.

The stigmata of the fore wings distinguish it from *N. osmyloides* (*Ricania*, Vol. I. p. 157), to which it is most nearly allied.

215. *NOGODINA PLENA*. *Mas.* Testacea, capite nigro-quadrinaculato, vertice fusco-quadrinaculato carina transversa arcuata, fronte carina transversa arcuata, carinis duabus strigisque duabus nigris, facie unicarinata vittis duabus apiceque nigris, prothorace unicarinato fusco-punctato, mesothorace vitta strigisque octo nigris carinisque tribus piceis, abdominis segmentis piceo marginatis, femoribus piceo fasciatis, alis subcinereis, alis anticis stigmatibus nigro ochraceo-notato venis transversis plurimis.

*Male.* Testaceous. Head with prominent borders; two black spots on each side between the eyes; vertex four times as broad as long, with two brown spots on each side, and with a transverse arched keel; front about twice as long as broad, with two black abbreviated keels, which converge from the vertex, and with two black irregular streaks towards the face, where the sides are rounded; face black towards the tip, with two black stripes, and with one keel. Prothorax much arched, with one keel and with brown points on each side. Mesothorax with a black stripe and with four exterior small black marks on each side, and with three piceous keels, the keel on each side curved and united with the middle one on the fore border. Abdomen with a piceous band on the hind border of each segment. Femora with a piceous band near the tip. Wings vitreous, slightly cinereous; veins mostly black; marginal veins forked. Fore wings with eight irregular lines of transverse veins, the five exterior lines approximate; a regular and complete submarginal line; stigma black, with an ochraceous mark. Hind wings with one irregular line of transverse veins. Length of the body 4 lines, of the wings 12 lines.

*Hab.* Ké.

The markings of the face and the larger stigma of the fore wings distinguish it from *N. venosa*, to which it is much allied.

216. *NOGODINA VENOSA.* *Fœm.* Testacea, vertice nigro-sexguttato, fronte tricarinata nigro octoguttata carinis laterilibus nigris, facie annulo fusiformi nigro, prothorace vittis duabus nigris vittisque duabus exterioribus piceis, mesothorace bicarinato, vittis quatuor, maculis duabus punctisque quatuor nigris, pectore nigro-guttato, femoribus macula subapicali nigra, tibiis tarsisque apice nigris, alis pellucidis, alis anticis venis nigris, venis marginalibus furcatis nigricante nebulosis venis, transversis nonnullis testaceis, stigmatate nigricante.

*Female.* Testaceous. Head forming an oblique angle on each side between the eyes; vertex arched, six times as broad as long, with four black dots in a transverse line; a black dot on each side above the eye; front nearly twice as long as broad, slightly rounded towards the face, with slightly elevated sides, with a black dot near the summit, with three elongated black dots on each side, and with three keels; of these the middle one is abbreviated, and is more slight than the lateral keels, which are black and converge from the summit towards the face; face with two black stripes, which form a fusiform ringlet and occupy the whole of the apical part. Prothorax much arched, with two black stripes, and with exterior piceous stripes, which diverge towards the hind border. Mesothorax with two keels, which are united in front and diverge hindward; two black stripes between the keels, and on each side an interrupted black stripe, a black spot; and two black points. Pectus with several



black dots. Femora with a black spot near the tips; tibiae and tarsi with black tips, the former with a black band near the base. Wings vitreous. Fore wings with seven lines of transverse veins; first and second lines very incomplete; third, fourth, fifth, and sixth irregular; seventh submarginal, regular; marginal veins forked, clouded with blackish; veins black; some of the transverse veins testaceous; stigma blackish, elongated, including some testaceous veins. Hind wings with one incomplete line of transverse veins; marginal veins forked. Length of the body  $4\frac{1}{2}$  lines, of the wings 12 lines.

*Hab.* Flores.

217. *NOGODINA ALLIGATA*. *Mas.* Picea, capite, thorace antico, ventre pedibusque testaceis, fronte bicarinata lineis quatuor e punctis nigris, facie unicarinata, mesothorace tricarinato, alis anticis albido sexnotatis venis transversis plurimis, venis marginalibus furcatis, alis posticis cinereis fere hyalinis fusco late marginatis.

*Male.* Piceous. Head, fore part of the thorax, abdomen beneath, and legs testaceous. Head with slightly prominent borders; vertex short, slightly arched; front nearly twice as long as broad, slightly rounded on each side towards the face, with two slight keels, which converge from the vertex and are bordered by four exterior lines of black points; face with a slight keel. Prothorax arched, hiding part of the vertex. Mesothorax with three keels, the keel on each side diverging much from the middle one. Fore wings with six whitish marks; first mark in the disk before the middle; second in the disk behind the third, which is costal; fourth, fifth, and sixth forming a submarginal transverse streak; transverse veins very numerous, some of them forming two regular lines near the exterior border, and a transverse ridge which joins the second and third marks; transverse costal veins parallel, very numerous, forked near the tip of the wing; marginal veins forked. Hind wings cinereous, nearly hyaline, broadly bordered with brown; an incomplete line of transverse veins, marginal veins forked. Length of the body  $4\frac{1}{2}$  lines, of the wings 12 lines.

*Hab.* Cram.

#### Gen. GABALÆCA.

*Fœm.* *Corpus* robustum. *Caput* thorace paullo angustius; frons unicarinata, lateribus anticis subangulatis; facies unicarinata. *Oculi* magni, globosi. *Antennæ* brevissimæ. *Prothorax* unicarinatus. *Mesothorax* tricarinatus. *Oviductus* longus, arcuatus. *Pedes* breves, robusti. *Alæ* anticæ apice rotundatæ, venis transversis plurimis.

*Female.* Body stout. Head a little narrower than the thorax, with slightly prominent borders; vertex much broader than



long; front with one keel, much longer than broad, slightly increasing in breadth from the vertex to rather beyond two-thirds of the length, where it is slightly angular; face lanceolate, nearly as long as the front, with a very slight keel. Eyes large, globose. Antennæ very short. Prothorax triangular, with one keel, extending over the hind part of the vertex. Mesothorax with three keels. Abdomen with a long lanceolate oviduct, which is curved downward. Legs short, stout. Wings nearly hyaline. Fore wings rounded at the tips; veins stout; seven irregular lines of transverse veins. Hind wings with very few veins.

218. *GABALCEA RETIFERA*. *Fœm.* Testacea, fronte nigro bifasciata, facie apice nigra, oviductu ferrugineo, femoribus tibiisque piceo vitatis, alis cinereis fere hyalinis nigro venosis.

*Female.* Testaceous. Front with two black bands near the vertex; face black towards the tip. Oviduct ferruginous. Femora and tibiae striped with piceous; wings cinereous, veins black. Length of the body  $4\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* New Guinea.

Gen. *NEPHESA*, *Amyot et Serv.*

219. *NEPHESA BISTRIGUTTATA*, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 591.

*Hab.* Aru.

220. *NEPHESA GUTTULATA*, *Stål*, *Trans. Ent. Soc. Lond.* 3rd ser. i. 591.

*Hab.* Batchian.

221. *NEPHESA ERUBESCENS*. *Pœcilopectera erubescens*, *Wlk. Journ. Ent.* i. 313.—*Nephesa gemmifera*, *Stål*, *Trans. Ent. Soc. Lond.* i. 592.

*Hab.* Batchian.

222. *NEPHESA CONSOCIATA*. *Pœcilopectera consociata*, *Wlk. Journ. Ent.* i. 314.—*Nephesa cicatricosa*, *Stål*, *Trans. Ent. Soc. Lond.* i. 592.

*Hab.* Batchian; Ternate.

223. *NEPHESA INTACTA*. *Mas.* Pallide testacea, capite lateribus subcarinatis, vertice transverso unicarinato, fronte, prothorace et mesothorace tricarinatis, alis albis latissimis fere hyalinis, alis anticis apice rectangulatis, margine exteriore recto angulo postico acuto, venis transversis plurimis.

*Male.* Pale testaceous. Head with slightly prominent borders; vertex four times as broad as long, with one keel; front a little broader than long, rounded on each side, with three keels, the keel on each side curved outward; face not keeled. Prothorax arched, with three keels; the keel on each side very oblique. Mesothorax with three keels,

the lateral keels converging hindward. Wings white, nearly hyaline, very broad. Fore wings rectangular at the tips, tuberculate at the base; exterior border straight; interior angle acute; transverse veins in the disk rather numerous; transverse costal veins numerous, regular; marginal veins forked. Hind wings with no transverse veins; some of the marginal veins forked. Length of the body 5 lines, of the wings 16 lines.

*Hab.* Aru.

It resembles *N. rosea*; but the fore wings have much fewer transverse veins.

224. *NEPHESA AMGENA*. *Mas et Fœm.* Alba, capite lateribus subcarinatis, vertice, fronte, prothorace et mesothorace tricarinatis, alis anticis rufo guttatis et punctatis fusco ex parte marginatis, apice rectangulatis angulo postico acutissimo, venis transversis plurimis. Var.  $\beta$ . Viridis, pectore, ventre alisque posticis albis, alis anticis annulis nonnullis. Var.  $\gamma$ . Alis anticis pallide roseis guttis punctisque saturioribus.

*Male and Female.* White. Head with slightly prominent borders; vertex arched, nearly four times as broad as long, with three keels, the keel on each side diverging hindward from the middle one; front not longer than broad, hardly rounded on each side, with three keels, which do not extend to the face, the keel on each side curved outward; face not keeled. Prothorax arched, with a few red points, and with three keels, the keel on each side diverging hindward from the middle one. Mesothorax with three keels, the keel on each side hardly curved. Fore wings rectangular at the tips, tuberculate at the base, with various red dots and points; a brown point in the middle of the hind border, which is sometimes brown from the point to the base; exterior border brown; interior angle prominent, very acute; transverse veins and transverse costal veins numerous, the latter regular.

Var.  $\beta$ . Green; pectus, abdomen beneath, and hind wings white; some of the dots on the fore wings forming ringlets, which in a few cases have white disks.

Var.  $\gamma$ . Fore wings pale rose-coloured, with bright rosy dots and points. Length of the body  $3\frac{1}{2}$ –4 lines, of the wings 12 lines.

*Hab.* Morty; Sula; Gilolo; Ceram.

The prominent head and the acute fore wings distinguish it from *N. gemmifera*.

225. *NEPHESA CONFICITA*. *Mas.* Pallide testacea, capite lateribus subcarinatis, vertice transverso unicarinato, fronte tricarinata, prothorace carina rufescente, mesothorace tricarinato; alis anticis rufo maculatis guttatis punctatis et venosis, apice rotundatis angulo

postico acuto bene determinato, linea marginali nigricante interrupta, venis transversis plurimis; alis posticis albis.

*Male.* Pale testaceous. Head with slightly prominent borders; vertex arched, full twice as broad as long, with one keel; front hardly broader than long, rounded on each side, with three keels, which do not extend to the costa; the keel on each side curved outward, remote from the middle one; face not keeled. Prothorax arched, with one keel, which is reddish. Mesothorax with three keels, the lateral keels converging hindward. Fore wings rounded at the tips; interior angle prominent, acute; a blackish line along the exterior border, interrupted by the veins; a few red spots and dots, and many red points; veins mostly red; transverse veins and transverse costal veins numerous, the latter regular; hind wings white. Length of the body  $3\frac{1}{2}$  lines, of the wings 11 lines.

*Hab.* Gilolo.

The red veins and the markings of the fore wings distinguish it from *N. amœna*.

226. *NEPHESA SPARGULA.* *Mas.* Pallide flavescens, subtus albida, vertice transverse unicarinato, fronte unicarinata, prothorace vitta punctisque rufis, mesothorace carinis tribus punctisque duobus ochraceis, pedibus robustis albidis, tarsis fulvis, alis anticis guttis quinque venisque transversis rufis, venis marginalibus nonnullis furcatis, alis posticis albis.

*Male.* Pale yellowish, whitish beneath. Head as broad as the thorax; vertex short, with a transverse keel; front much broader than long, with one keel, and with rounded and slightly prominent borders; face triangular, as long as the front. Prothorax arched, extending over part of the vertex, with a red stripe and with red points. Mesothorax with three ochraceous keels; the lateral keels curved, connected on the hind border; an ochraceous point on each side beyond the keels. Legs short, stout, whitish; tarsi tawny. Fore wings tuberculate at the base and along two-thirds of the length of the interior border; five red dots forming a streak near and parallel to the interior border; transverse veins red, forming five irregular lines; transverse costal veins very numerous, several of them forked; some of the marginal veins forked. Hind wings white. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* New Guinea.

227. *NEPHESA CHLOROSPILA.* *Mas et Fem.* Viridis, capite lateribus carinatis, vertice transverso subconico unicarinato, fronte, prothorace et mesothorace tricarinatis, tarsis rufescentibus, alis anticis apice rotundatis costa flavescente apicem versus rufa, venis transversis plurimis, venis marginalibus furcatis, alis posticis albis.

*Male and Female.* Green. Head with prominent borders; vertex

slightly conical, more than twice as broad as long, with one keel; front much longer than broad, with the borders rounded towards the face, and with three keels; the keels on each side slightly curved outward, less prominent than the middle one, not extending to the face, which has one keel. Prothorax arched, with three keels, the keel on each side very oblique. Mesothorax with three keels. Tarsi reddish. Fore wings tuberculate at the base; tip and interior angle rounded; exterior border and adjoining part of the costa red; rest of the costa yellowish; transverse veins and transverse costal veins numerous, the latter regular; marginal veins forked. Hind wings white. Length of the body 3-3½ lines, of the wings 10 lines.

*Hab.* Mysol; New Guinea.

228. *NEPHESA ROSEOPARSA*. *Mas.* Viridescenti-testacea, fronte unicarinata, mesothorace bicarinato, alis anticis guttis mediis punctisque marginalibus rufis vena marginali una furcata, alis posticis albis venis marginalibus non furcatis.

*Male.* Greenish testaceous. Vertex short; front much broader than long, rounded on each side, with one keel; face triangular. Prothorax arched, covering most of the vertex. Mesothorax with two keels. Fore wings tuberculate at the base and along more than half the length of the costa and of the hind border, adorned with several various-sized red dots on the disk, and with many marginal red points; transverse veins in the disk few and irregular; transverse veins in the costal space numerous, some of them parallel; one forked marginal vein. Hind wings white, with an incomplete line of transverse veins; marginal veins not forked. Length of the body 2 lines, of the wings 6 lines.

*Hab.* Mysol.

229. *NEPHESA RUFILINEA*. *Mas.* Pallide ochracea, fronte tricarinata rufo marginata, thorace rufo-univittato, mesothorace tricarinato, alis anticis rufo marginatis venis transversis plurimis, alis posticis albis.

*Male.* Pale saffron-colour. Head with slightly prominent borders; vertex short, nearly hidden by the prothorax; front a little broader than long, with rounded red borders, and with three keels, of which the keel on each side is very indistinct. Thorax with a red stripe. Prothorax arched. Mesothorax with three keels, the keel on each side diverging hindward from the middle one. Fore wings slightly tuberculate at the base, rounded at the tips, with a narrow red border, which disappears towards the base of the costa; transverse veins in the disk and transverse costal veins numerous, the latter mostly regular. Hind wings white. Length of the body 3 lines, of the wings 9 lines.

*Hab.* Mysol.

230. *NEPHESA LINEOLA*. *Mas.* Albida, capite lateribus subcarinatis, vertice fronteque unicarinatis, mesothorace tricarinato, alis anticis apice rectangulatis angulo postico determinato acuto strigis duabus antemediis longitudinalibus ochraceis, venis transversis plurimis.

*Male.* Whitish. Head with slightly prominent borders; vertex about four times as broad as long, with one keel; front a little longer than broad, with slightly rounded borders, and with one slight keel; face not keeled. Prothorax arched. Mesothorax with three keels. Fore wings with two ochraceous longitudinal streaks near the base, rectangular at the tips; interior angle very prominent and acute; transverse veins in the disk and transverse costal veins very numerous, the latter regular. Length of the body 4 lines, of the wings 16 lines.

*Hab.* Lombok.

The vertex is much more prominent than that of *N. intacta*.

231. *NEPHESA MARGINALIS*. *Mas.* Pallidissime testacea, vertice unicarinato, fronte tricarinata, facie non carinata, prothorace unicarinato, mesothorace tricarinato, alis albis, alis anticis basi pallidissime testaceis apice rectangulatis margine exteriori nigro, venis transversis plurimis.

*Male.* Very pale testaceous. Head with slightly prominent borders; vertex with one keel, four times as broad as long; front a little broader than long, rounded on each side, with three keels, which do not extend to the face, the keel on each side curved outward; face not keeled. Prothorax arched, with one keel. Mesothorax with three keels. Wings white. Fore wings tuberculate and very pale testaceous at the base, rectangular at the tips, with a black line along the exterior border; transverse veins and transverse costal veins numerous, the latter regular. Length of the body 3 lines, of the wings 10 lines.

*Hab.* Gilolo.

Very nearly allied to *N. gemmifera*; but the sculpture of the thorax and the colour sufficiently distinguish it.

232. *NEPHESA AMATA*. *Mas.* Pallide testacea, capite lateribus subcarinatis, vertice brevissimo, fronte et mesothorace tricarinatis, prothorace unicarinato, pectore, abdomine pedibusque albidis, alis anticis ochraceo-roseis apice rotundatis venis transversis plurimis, alis posticis albis.—*Var. β.* Alis anticis late purpurascente marginatis.

*Male.* Pale testaceous. Head with slightly prominent borders; vertex very short; front a little broader than long, with rounded borders, and with three keels, the lateral keels converging towards the face, which is not keeled. Prothorax arched, with one keel. Mesothorax with three keels, the lateral keels converging hindward. Pectus, abdomen, and legs whitish. Fore wings ochraceous-rosy, rounded at the tips and on the interior angle, tuberculate at the base; transverse



veins and transverse costal veins numerous, the latter regular; a few of the marginal veins forked; hind wings white.—Var.  $\beta$ . Fore wings broadly and irregularly purplish-bordered along the costa and along the exterior margin. Length of the body 4 lines, of the wings 13 lines.

*Hab.* Waigiou.

233. *NEPHEsa SUBJECTA*. *Mas.* Testacea, capite lateribus subcarinatis, vertice longo unicarinato, fronte transversa tricarinata, mesothorace tricarinato, abdomine cristato apice densissime floccoso, alis anticis pallide viridibus venis transversis plurimis, venis marginalibus furcatis, alis posticis albis.

*Male.* Testaceous. Head with slightly prominent borders; vertex four times as broad as long, with one keel; front a little broader than long, with rounded borders and with three keels, the keel on each side slightly curved outward; face not keeled. Prothorax arched, not keeled. Mesothorax with three keels, the lateral keels converging slightly hindward. Abdomen with crested segments, and with an apical mass of compact white filaments. Fore wings pale-green, tuberculate at the base, with the tip and the interior angle rounded; a slight oblique postmedial fold, retracted near the costa; transverse veins beyond the crease rather numerous; costal transverse veins numerous, regular; marginal veins mostly forked. Hind wings white, with a few forked veins and with two transverse veins. Length of the body  $3\frac{1}{2}$  lines, of the wings 10 lines.

*Hab.* Makian; Celebes.

The less prominent vertex and the more rounded fore wings distinguish it from *N. chlorospila*.

234. *NEPHEsa DECOLOR*. *Mas.* Pallidissime flava, fronte, prothorace et mesothorace tricarinatis, pectore, segmentorum abdominalium marginibus pedibusque albidis, alis anticis ochraceo pallido suffusis venis transversis plurimis, alis posticis albis.

*Male.* Very pale yellow. Head with slightly prominent borders; vertex full four times as broad as long; front not longer than broad, with rounded borders and with three keels, the keel on each side slightly curved outward, united to the middle one near the vertex. Prothorax arched, with three keels, the keel on each side very oblique. Mesothorax with three keels, the keel on each side hardly curved outward. Pectus, hind borders of the abdominal segments, and legs whitish. Fore wings with a pale saffron tinge, which hardly appears in the disk, beset with tubercles, which are mostly at the base and along the adjoining part of the hind border; transverse veins in the disk and transverse costal veins very numerous. Hind wings white. Length of the body 4 lines, of the wings 14 lines.

*Hab.* Mysol; Waigiou.

235. *NEPHEsa ALBESCENS*. *Mas.* Pallide testacea, fronte unicarinata, facie mesothoraceque non carinatis, alis anticis albidis testaceo pallido marginatis venis transversis paucis, alis posticis albis.

*Male.* Pale testaceous. Vertex very short; front not longer than broad, much narrower towards the face, with slightly prominent borders and with a middle keel; face not keeled. Prothorax much arched, partly covering the vertex. Mesothorax not keeled. Fore wings whitish, bordered with pale testaceous, tuberculate along part of the costa and of the interior border; transverse veins few and irregular, excepting those which form two lines near the exterior border; costal transverse veins numerous, regular; two forked apical veins. Hind wings white. Length of the body  $2\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* Mysol; New Guinea.

The testaceous colour distinguishes it from *N. deducta*.

236. *NEPHEsa MONOLEUCA*. *Mas.* Alba, fronte conica flexa antice tricarinata, prothorace et mesothorace tricarinatis, alis anticis venis transversis paucis, venis marginalibus nonnullis furcatis.

*Male.* White. Head with slightly prominent borders; vertex nearly hidden by the prothorax; front conical, keeled and extending somewhat beyond the vertex above, its fore part perpendicular, longer than broad, with rounded borders and with three keels, the keel on each side less prominent than the middle one, with which it is connected above. Prothorax arched, with three keels, the keels on each side very oblique. Mesothorax with three slight keels. Fore wings rounded at the tips; a few transverse veins in the disk; costal transverse veins numerous, regular; some of the marginal veins forked. Length of the body 3 lines, of the wings 10 lines.

*Hab.* New Guinea.

The conical head, the longer front and the keeled prothorax distinguish it from *N. obtusa*.

237. *NEPHEsa OBTUSA*. *Mas.* Pallide ochracea, fronte et mesothorace tricarinatis, alis anticis albidis basi pallide ochraceis venis transversis paucis, venis marginalibus furcatis, alis posticis albis.

*Male.* Pale saffron-colour. Head with slightly prominent borders; vertex mostly hidden by the prothorax; front a little longer than broad, narrower towards the face, with rounded borders and with three keels, the keel on each side less prominent than the middle one. Prothorax arched. Mesothorax with three slight keels, the keel on each side indistinct towards the fore border. Fore wings whitish, pale saffron-colour at the base, rounded at the tips; a few transverse veins in the disk; transverse costal veins numerous, regular; marginal veins forked. Hind wings white. Length of the body 3 lines, of the wings 9 lines.

*Hab.* New Guinea.

Much smaller than *N. decolor*, and the fore wings are more rounded.

238. *NEPHESA NIVOSA*. *Mas.* Viridi testaceoque albida, fronte et mesothorace unicarinatis, alis anticis venis transversis paucis, venis marginalibus ex parte furcatis, alis posticis albis.

*Male.* Whitish, tinged with pale green and pale testaceous. Vertex very short; front not broader than long, with one keel and with rounded and elevated sides. Prothorax arched, hiding most of the vertex. Mesothorax with a slight keel. Fore wings tuberculate along half the length of the interior border; transverse veins few and irregular except those along the costa, which are parallel and very numerous; a few forked marginal veins. Hind wings white. Length of the body 2 lines, of the wings 6 lines.

*Hab.* New Guinea.

*N. deducta* much resembles this species; but its front has three keels and does not decrease so much in breadth towards the face.

239. *NEPHESA INVASA*. *Fæm.* Pallide testacea, capite lateribus subcarinatis, vertice, fronte, prothorace et mesothorace tricarinatis, alis anticis fuscis vitta costali vittaque postica albidis venis transversis plurimis, venis marginalibus furcatis, alis posticis albis.

*Female.* Pale testaceous. Head with slightly prominent borders; vertex and front with three slight keels, which do not extend to the face; vertex more than four times as broad as long; front a little broader than long, rounded on each side, the lateral keels curved outwards; face not keeled. Prothorax slightly arched, with three keels, the keel on each side very oblique. Mesothorax with three keels. Fore wings brown, with a whitish costal stripe which extends from the base to three-fourths of the length; a much broader and slightly shorter whitish stripe extending from the base near the hind border, much narrower beyond the middle; transverse veins in the disk and transverse costal veins numerous, the latter regular; marginal veins forked. Hind wings white. Length of the body 4 lines, of the wings 13 lines.

*Hab.* Waigiou.

240. *NEPHESA ANTICA*. *Mas.* Pallide flava, fronte subrotundata unicarinata, prothorace arcuato, mesothorace unicarinato, abdomine rufo, alis nigro-cinereis, alis anticis disco pallidioribus.

*Male.* Pale yellow. Head with slightly prominent sides; vertex four times as broad as long; front hardly longer than broad, with one keel and with slightly rounded borders. Prothorax arched, extending over part of the vertex. Mesothorax with a slight keel. Abdomen

red. Wings blackish cinereous; veins black. Fore wings somewhat paler in the disk, rounded at the tip and on the interior angle. Length of the body  $2\frac{1}{2}$  lines, of the wings 7 lines.

*Hab.* New Guinea.

Gen. FLATA, *Fab.*

241. FLATA SUBACUTA. *Fæm.* Fulva, robusta, subtus testacea, fronte tricarinata, mesothorace parvo, pedibus validis, alis anticis pallide viridibus costa margineque exteriore rotundatis angulo interiore producto acuto venis transversis plurimis, alis posticis albis.

*Female.* Tawny, stout, testaceous beneath. Head with slightly prominent borders; vertex twice as broad as long; front a little longer than broad, wider and slightly angular towards the face, with three short slight keels. Prothorax arched, hiding the hind part of the vertex. Mesothorax small. Legs stout. Fore wings pale green; costa and exterior border forming a continuous curve; interior angle acute, very prominent; transverse veins numerous, irregular. Hind wings white. Length of the body 4 lines, of the wings 10 lines.

*Hab.* Mysol.

The prominent hind angles of the fore wings distinguish it from *F. distinctissima* (*Pæcilopectera distinctissima*, Cat. Hom. v. p. 114).

242. FLATA COMBINATA. *Mas.* Alba, capite unicarinato, prothorace et mesothorace arcuatis, tarsis nigris, alis anticis macula ochracea guttaque elliptica nigra antemediis connexis venis transversis plurimis furcatis.

*Male.* White. Head with slightly prominent borders, vertex and front blended together and forming one compartment, which is much longer than broad, and has a slight keel. Prothorax and mesothorax arched. Tarsi black. Fore wings with the veins thrice successively forked and thereby very numerous near the exterior border; a small ochraceous spot in the disk near the base, connected with an elliptical black dot. Hind wings with comparatively few veins, most of which are twice forked. Length of the body 6 lines, of the wings 24 lines.

*Hab.* Makian; Celebes.

Closely allied to *F. Helena*; but the fore wings are without bands, and the spot in the disk is partly ochraceous.

243. FLATA QUADRIGUTTATA. Alba, tibiis tarsisque anterioribus nigris, alis anticis guttis duabus nigris, 1<sup>a</sup> antemediæ, 2<sup>a</sup> mediæ.

White, in structure like *F. combinata*. Anterior tibiæ and anterior tarsi black. Fore wings with two black dots in the disk, one near the base, the other in the middle; veins successively forked, very numerous towards the exterior; transverse veins and transverse costal veins very

numerous, many of them attar forked. Length of the body 5 (?) lines, of the wings 20 lines.

*Hab.* New Guinea.

It has only four black dots on the fore wings, and is thus distinguished from *F. guttula*.

244. *FLATA CHLOROLEUCA*. *Mas.* Pallide testacea, capite lateribus carinatis, vertice fronteque transversim stricarinatis, vertice nigro-unistrigato, prothorace bicarinato, mesothorace unicarinato, alis anticis amplius rotundatis pallide viridibus apices versus albo floccosis plaga antemedia saturatiore lineis duabus longitudinalibus guttularibus strigaeque exteriore obliqua arcuata nigris, alis posticis albis.

*Male.* Pale testaceous. Head with prominent borders; vertex and front much broader than long, with three slight keels; vertex with a black streak; front narrower towards the face, which is not keeled. Prothorax arched, with two very oblique keels. Mesothorax with one keel. Wings very ample. Fore wings pale green, much rounded, white-flecked beyond the middle, with a deeper green patch near the base of the costa; two longitudinal lines of black dots in the disk, and an exterior oblique curved black streak; transverse veins very numerous beyond the middle; costal transverse veins long, numerous, regular. Hind wings white, with forked veins and with two transverse veins. Length of the body 6 lines, of the wings 20 lines.

*Hab.* Makian; Celebes.

#### Gen. COLOBESTHES, *Amyot et Serv.*

245. *COLOBESTHES FALCATA*, *Amyot et Serv.* C. albiplana, Vol. I. pp. 92, 161.

*Hab.* Sumatra. Inhabits also Java, Singapore, and Borneo.

246. *COLOBESTHES RECTILINEA*. *Mas.* Albido-testacea, capite viridimarginato, fronte tricarinata, thorace tricarinato, tibiis tarsisque anticis nigris, alis albis, alis anticis roseo submarginatis apice rotundato.

*Male.* Whitish testaceous. Head with a pale green rim on each side; three ridges, of which the pair are curved outward. Thorax with three very slight ridges. Fore tibiae and fore tarsi black; posterior tarsi with black tips. Wings white. Fore wings rounded at the tips, with a very pale rosy tinge along the borders; costa and exterior border straight, the latter rather oblique; interior angle slightly obtuse. Length of the body 6 lines, of the wings 27 lines.

*Hab.* Sumatra.

247. *COLOBESTHES HASTIFERA*. *Mas.* Pallidissime ochracea, capite conico subascendente tricarinato, alis anticis apice rectangulatis plagis duabus postmediis guttisque nonnullis albidis punctis duobus rufis albo marginatis angulo interiore lanceolato, alis posticis albis.



*Male.* Very pale ochraceous. Head conical and slightly ascending above, with a rim on each side, and with three ridges, of which the pair are very slight. Fore wings rectangular at the tips, with two whitish postmedial patches, and with several whitish dots, most of which are between the patches and the exterior border; two red white-bordered points in the disk, one near the base, the other rather beyond the middle; costa very slightly convex; exterior border straight, not oblique, interior angle elongated, lanceolate. Hind wings white. Length of the body 4 lines, of the wings 16 lines.

*Hab.* Mysol.

The conical head of this species and of *C. conspersa* distinguish them from *C. falcata*, and from the other typical species of the genus. It differs from *C. conspersa* in the fore wings, which have no black veins, and are adorned with two red points.

#### Genus PHRONIMA, Stål.

248. PHRONIMA HAMIFERA. *Mas.* Pallidissime ochracea, antennis nigris, prothorace tricarinato carinis lateralibus antice vix cornutis, mesothorace carinis tribus antice abbreviatis, tibiis tarsisque anterioribus nigricantibus, alis anticis rotundatis vitta obscuriore reflexa, alis posticis albis costa basi dilatata rectangulata.

*Female.* Very pale ochraceous. Head with a deep ridge on each side. Antennæ black, cylindrical; third joint about twice the length of the second. Prothorax with three ridges, of which the pair form two extremely short horns in front. Mesothorax with three ridges; these are abbreviated in front, and the pair converge towards the hind border. Legs grooved; anterior tibiæ and anterior tarsi blackish. Fore wings much rounded at the tips and on the interior angle; a rather darker middle stripe, which is reflexed near the exterior border and thence extends along more than half its length towards the base; costa convex; exterior border much rounded. Hind wings white; costa dilated and forming a right angle near the base. Length of the body 7 lines, of the wings 24 lines.

*Hab.* Sumatra.

249. PHRONIMA PRUNIFERA. *Mas.* Rufescens, albo pulverulenta, capite viridi, vertice rufescente, antennis nigris, prothorace viridi-marginato tricarinato, mesothorace bicarinato, abdomine pedibusque pallide viridibus, alis anticis dimidio exteriore pallide viridi punctis guttisque plurimis rufescentibus, alis posticis albis.

*Male.* Reddish, thickly powdered with white. Head green, with prominent borders; vertex reddish, much longer than broad, decreasing in breadth from the hind border; front as long as the face, increasing in breadth towards the face. Antennæ black. Prothorax bordered with green; the middle part slightly tumid, with three keels; the

lateral keels united in front, slightly curved, longer than the middle one. Mesothorax with two keels. Abdomen and legs pale green. Fore wings pale green beyond the middle, with many dots and points of the ground-hue. Hind wings white. Length of the body 6 lines, of the wings 24 lines.

*Hab.* Sumatra.

It may be distinguished from *P. stollii* by the fore wings, which have no band and are covered with dots to the tips.

Gen. PÆCILOPTERA, *Latr.*

250. PÆCILOPTERA CIRCULATA. See Vol. I. p. 161.

*Hab.* Sumatra. Inhabits also Java and Borneo.

Gen. CROMNA, *Walk.*

251. CROMNA QUADRIPUNCTATA. *Masc.* Pallide testacea, vertice unicarinato subconico subascendente, fronte, prothorace et mesothorace tricarinatis, alis anticis albidis roseo bipunctatis venis transversis plurimis, venis marginalibus furcatis, alis posticis albis.

*Male.* Pale testaceous. Head with slightly prominent borders; vertex very much broader than long, somewhat conical, slightly ascending, with one keel; front much longer than broad, conical towards the vertex, with three keels, the keel on each side slightly curved. Prothorax arched, with three keels, the keel on each side very oblique. Mesothorax with three keels, the keel on each side slightly curved. Legs short. Fore wings whitish, tuberculate at the base and along most of the length of the interior border; two red points in the disk, one antemedial, the other postmedial; transverse veins numerous, irregular; costal transverse veins regular; marginal veins forked. Hind wings white. Length of the body 3 lines, of the wings 11 lines.

*Hab.* Mysol.

252. CROMNA CENTRALIS. *Mas.* Pallide viridis, vertice prothoraceque unicarinatis, fronte et mesothorace tricarinatis, tarsis pallide rufescentibus; alis anticis apice rectangulatis punctis paucis rufis, gutta rufa albido marginata, puncto nigro, linea marginali fusca interrupta, venis transversis plurimis; alis posticis albis.

*Male.* Pale green, paler beneath. Head with slightly prominent borders; vertex short, conical, twice as broad as long, with one keel; front flat, hardly longer than broad, with slightly rounded sides and with three keels, the keel on each side curved outward; face not keeled. Prothorax much arched, slightly tuberculate, with one keel. Mesothorax with three keels, the keel on each side slightly inclined hindward towards the middle one. Tarsi pale reddish. Fore wings rectangular at the tips, with tubercles, which are most prevalent along the costa and along the hind border; a few red points and a brighter-

red whitish-bordered middle dot; a black point on the interior border at two-thirds of the length; a brown interrupted line on the exterior border; transverse veins numerous, irregular; transverse costal veins numerous, regular. Hind wings white. Length of the body  $3\frac{1}{2}$  lines; of the wings 12 lines.

*Hab.* Morty.

Genus *SERIDA*. See Vol. I. p. 158.

253. *SERIDA FERVENS*. See Vol. I. p. 158.

*Hab.* Sula. Inhabits also Borneo.

254. *SERIDA PROXIMA*. *Mas.* Fulva, capite thoraceque unicarinatis, capite longiconico, alis posticis apice fuscis.

*Male.* Tawny. Head conical; vertex keeled; front projecting beyond the vertex, obliquely retracted beneath the vertex, more than four times as long as broad, widening towards the face, with a prominent keel and with slightly elevated borders. Prothorax and mesothorax arched, keeled, the former partly extending over the vertex. Fore wings with regular oblique costal veinlets and with several longitudinal veins, some of which are forked; forks of various length. Hind wings brown towards the tips. Length of the body 3 lines, of the wings 9 lines.

*Hab.* Ké.

It much resembles *S. fervens*; but the vertex is more prominent and more arched.

Fam. MEMBRACINA, *Burm.*

Gen. *HYPSAUCHENIA*, *German.*

255. *HYPSAUCHENIA HARDWICKII*, *Kirby, Mag. Nat. Hist.* 1827, xx. p. 36 (*Centrotus*).

*Hab.* Tondano. Inhabits also Nepaul.

Gen. *CENTROTUS*, *Fabr.*

256. *CENTROTUS REPONENS*, *Walk. Cat. Hom.* vol. ii. p. 604.

*Hab.* Flores; New Guinea; Timor. Inhabits also Hindostan, Ceylon, and the Philippine Isles.

257. *CENTROTUS ALTICEPS*. *Fæm.* Niger, thorace scabro cornu erecto cornibus duobus lateralibus deflexis latissimis subarcuatis armato strigis quatuor testaceis cornu postico subarcuato abdominis apicem superante, pectore abdomineque testaceo-tomentosis.

*Female.* Black. Head punctured. Thorax scabrous, slightly keeled, forming a stout cone which rises perpendicularly from the head, and is armed on each side with a very broad directly diverging slightly downward-curved horn, which is full twice as long as the inter-

mediate breadth; two testaceous streaks on each side; hind part prolonged into a lanceolate slightly downward-curved horn, which extends somewhat beyond the tip of the abdomen. Pectus and abdomen beneath with testaceous tomentum. Length of the body  $5\frac{1}{2}$  lines, of the wings 11 lines.

*Hab.* Aru.

Like *C. gazella* in structure.

258. *CENTROTUS STRIGATUS*. *Fæm.* Niger, thorace cornibus duobus lateralibus subarcuatis longis acutis cornu postico subundulato abdominis apicem longe superante, pedibus piceis, tibiis tarsisque posticis testaceis, alis anticis lurido-hyalinis vitta costali lata arcuata, macula costali strigaeque postica nigris, alis posticis cinereo-hyalinis.

*Female.* Black, very thick. Thorax minutely punctured, with one keel and with two stout slightly curved diverging horns, each of which is much longer than the space between them; the hind part prolonged into a slightly undulating horn, which extends much beyond the tip of the abdomen. Legs piceous, pubescent; hind tibiae and hind tarsi testaceous. Fore wings lurid, nearly hyaline, with a broad black costal stripe which occupies all the base, and is curved to the hind border at two-thirds of the length; a black costal spot near the tip, and a black streak along the apical part of the hind border. Hind wings cinereous, hyaline. Length of the body 4 lines, of the wings 9 lines.

*Hab.* New Guinea.

259. *CENTROTUS ALBIGUTTA*. *Fæm.* Niger, scaber, thorace cornibus duobus lateralibus longis oblique ascendentibus maculis duabus lateralibus albis cornu postico recto abdominis apicem longe superante, pedibus fulvis, femoribus posticis apice tibiisque posticis pallide flavis, alis anticis flavis fere hyalinis vitta costali nigra coriacea lata abbreviata, venis flavis, alis posticis diaphanis.

*Female.* Black, scabrous. Head and thorax in front and pectus with cinereous pubescence. Thorax keeled, armed on each side with a slightly diverging obliquely ascending horn, which is much longer than the intermediate space; a white spot on each side at the base of the hind horn, which extends much beyond the tip of the abdomen. Legs tawny; coxae black; hind femora towards the tips, and hind tibiae, except at the tips, pale yellow. Fore wings yellow, nearly hyaline, with a broad black coriaceous costal stripe which occupies the whole base and extends to two-thirds of the length; veins yellow. Hind wings hyaline. Length of the body  $3\frac{1}{2}$  lines, of the wings 8 lines.

*Hab.* New Guinea.

260. *CENTROTUS ALBILATUS*. *Fæm.* Niger, thorace cornibus duobus lateralibus scabris longis latissimis subascendentibus maculis duabus

lateralibus albis cornu postico recto abdominis apicem attingente, pectoris lateribus albis, alis anticis basi punctatis.

*Female.* Black, thick. Head and thorax minutely punctured, with gilded pubescence. Thorax slightly keeled, armed on each side with a scabrous diverging very broad slightly ascending horn, which is as long as the intermediate breadth; a white spot on each side of the base of the straight hind horn, which extends to the tip of the abdomen. Pectus white on each side. Fore wings punctured towards the base. Length of the body  $4\frac{1}{2}$  lines, of the wings 9 lines.

*Hab.* New Guinea.

261. *CENTROTUS FORTICORNIS.* *Fæm.* Niger, thorace cornibus duobus lateralibus longis latissimis subascendentibus cornu postico valido arcuato abdominis apicem superante, tarsis fulvis, alis nigricantibus nigro venosis.

*Female.* Black, broad, thick. Thorax punctured, keeled, forming on each side a diverging slightly ascending very broad horn, which is longer than the middle space; hind part armed with a stout curved horn, which extends rather beyond the tip of the abdomen. Legs stout; tarsi tawny. Wings blackish; veins black. Length of the body 2 lines, of the wings 4 lines.

*Hab.* Celebes.

262. *CENTROTUS BREVIVITTA.* *Fæm.* Piceus, thorace cornibus duobus lateralibus breviusculis vix ascendentibus cornu postico arcuato abdominis apicem attingente, alis anticis hyalinis subluridis basi vitæ costali brevi piceis punctatis venis pallide flavescentibus, alis posticis cinereis.

*Female.* Piceous, dull. Head and thorax thickly punctured. Thorax thick, keeled, with two stout diverging very slightly ascending horns, which together are as long as the breadth of the thorax; hind part forming a horn, which is curved downward, and extends to the tip of the abdomen. Wings hyaline. Fore wings slightly lurid, with a piceous punctured costal stripe, which occupies all the base, and is much narrower at a little beyond its middle, and does not extend to two-thirds of the length of the costa; veins pale yellowish. Hind wings cinereous; veins black. Length of the body  $2\frac{1}{2}$  lines, of the wings 6 lines.

*Hab.* New Guinea.

263. *CENTROTUS PALLIPES.* *Mas.* Niger, thorace cornibus duobus lateralibus sat longis non obliquis, strigis duabus lateralibus albis obliquis, cornu postico abdominis apicem longe superante, pedibus testaceis, alis anticis luridis vitta costali nigra punctata linea marginali picea venis luteis, alis posticis cinereis.

*Male.* Black, broad, thick, roughly punctured. Head and thorax with a slight keel. Eyes very prominent. Rostrum and legs testaceous;



coxæ black. Scutum with an oblique white streak on each side, and with two acute horns, each of which is longer than half the breadth of the scutum, from which it directly extends. Scutellum forming a curved horn which extends much beyond the tip of the abdomen, and has a short oblique keel on each side at the base. Wings hyaline. Fore wings lurid, with a black punctured stripe, which extends from the base to two-thirds of the length; a piceous line along the hind border; veins luteous. Hind wings cinereous, with black veins. Length of the body 3 lines, of the wings 8 lines.

*Hab.* Mysol.

264. *CENTROTUS SEMILUCIDUS*. *Fam.* Niger, thorace cornibus duobus lateralibus longis subarcuatis subascendentibus cornu postico subundulato abdominis apicem paullo superante vittis duabus lateralibus albis, tibiis tarsisque posterioribus testaceis, alis anticis luridis, basi, costa margineque postico punctatis, venis fulvis, venis transversis nigris, alis posticis cinereis.

*Female.* Black, broad, thick. Head and thorax punctured, with pale pubescence. Thorax keeled, armed on each side with a diverging slightly curved and ascending horn, which is as long as the intermediate space, its hind part prolonged into a slightly undulating horn, which extends a little beyond the tip of the abdomen, and has on each side a short oblique keel which proceeds from the base; a white stripe on each side of the thorax, broadest on the scutellum. Posterior tibiæ and posterior tarsi testaceous. Fore wings lurid, black and punctured at the base and along the costa to three-fourths of the length; hind border black; veins tawny in the lurid part; transverse veins black. Hind wings cinereous. Length of the body 3 lines, of the wings 6 lines.

*Hab.* Waigion.

265. *CENTROTUS FEMORATUS*. *Fam.* Piceus, thorace cornibus duobus lateralibus nigris sat longis vix ascendentibus cornu postico recto abdominis apicem fere attingente, tibiis tarsisque fulvis, alis anticis lurido-hyalinis basi piceis et punctatis, venis pallide flavescentibus, alis posticis cinereis.

*Female.* Piceous, broad, thick. Head and thorax punctured, with slightly gilded pubescence. Thorax with a slight keel, armed on each side with a black diverging hardly ascending horn, which is about half the length of the middle space, its hind part forming a straight horn, which extends nearly to the tip of the abdomen. Tibiæ and tarsi tawny. Fore wings lurid hyaline, piceous and punctured at the base; veins pale yellowish. Hind wings cinereous; veins pale. Length of the body two lines, of the wings 4 lines.

*Hab.* Celebes.

266. *CENTROTUS PICEUS*. *Mas.* Piceus, capite, thorace antico abdomineque nigricantibus, thorace cornibus duobus lateralibus longis subascendentibus cornu postico recto cinereo-fasciato abdominis apicem paullo superante, tibiis tarsisque rufis, alis anticis fasciis duabus apiceque cinereo-hyalinis, alis posticis cinereis.

*Male.* Piceous, thick, punctured. Head, fore part of the thorax, and abdomen blackish. Thorax keeled, armed on each side with a broad diverging slightly ascending horn, which is a little shorter than the intermediate breadth; its hind part prolonged into a straight horn, which has a cinereous band before its middle, and extends a little beyond the tip of the abdomen. Tibiæ and tarsi red. Fore wings with two incomplete cinereous hyaline bands, of which the first is opposite the band on the thorax; tips and hind wings cinereous, hyaline. Length of the body 2 lines, of the wings 4 lines.

*Hab.* Batchian.

267. *CENTROTUS CONGESTUS*. *Mas.* Niger, thorace cornibus duobus lateralibus obliquis subascendentibus cornu postico recto abdominis apicem non attingente, pedibus testaceis, femoribus piccis apice testaceis, alis cinereis pallido venosis, alis anticis basi nigro punctatis.

*Male.* Black, thick, with slightly gilded pubescence. Thorax minutely punctured, armed on each side with a stout slightly ascending obliquely diverging horn, which is much shorter than the intervening space; hind horn straight, not extending to the tip of the abdomen. Legs testaceous, short, stout, pilose; coxæ black; femora piceous, with testaceous tips. Wings cinereous; veins pale testaceous. Fore wings black and punctured at the base. Length of the body 2 lines, of the wings 4 lines.

*Hab.* Sula.

268. *CENTROTUS GIBBOSULUS*. *Fœm.* Pallide luteus, capite pectoreque piccis, thorace antice piceo cornibus duobus lateralibus latissimis vix ascendentibus piceo unistrigatis cornu postico recto pallide flavo apicem versus gracillimo abdominis apicem fere attingente picco-bifasciato, abdomine pedibusque rufescentibus, alis cinereis, alis anticis basi piccis fasciis duabus fulvis.

*Female.* Pale luteous. Head and pectus piceous. Thorax very thick, distinctly keeled, minutely punctured, piceous along the fore border, with two very broad diverging hardly ascending horns, which are as long as the intermediate breadth, and are rounded along the fore border, where there is a piceous streak; hind part forming a pale yellow horn, which becomes much more slender at half its length, and extends almost to the tip of the abdomen, and has a piceous middle band and a piceous tip. Abdomen and legs deep reddish. Wings cinereous; veins pale. Fore wings with two irregular tawny bands, piceous at the base. Length of the body  $1\frac{3}{4}$  line, of the wings 4 lines.

269. *CENTROTUS FERRUGINEUS*. *Fœm.* Ferrugineus, thorace cor-

nibus duobus lateralibus rectis breviusculis, abdomine nigricante, alis cinereis hyalinis, alis anticis basi ferrugineis venis fulvis.

*Female.* Ferruginous, thick, with slightly gilded pubescence. Thorax slightly keeled, minutely punctured, armed on each side with a stout directly diverging horn, which is a little less than half the breadth of the intermediate space. Abdomen blackish. Wings cinereous, hyaline. Fore wings ferruginous and punctured at the base; veins tawny. Hind wings with black veins. Length of the body 2 lines, of the wings 4 lines.

*Hab.* New Guinea.

The hind horn of the specimen here described is broken.

270. *CENTROTUS TIBIALIS.* *Mas.* Niger, thorace cornibus duobus lateralibus vix ascendentibus cornu postico subarenato abdominis apicem paullo superante, tibiis posterioribus pallide flavis, alis cinereis hyalinis, alis anticis subluridis nigro bivittatis.

*Male.* Black, thick. Head and thorax minutely punctured. Thorax keeled, armed on each side with a diverging hardly ascending horn, which is hardly curved, and is a little shorter than the intermediate breadth of the thorax; hind horn slightly curved downward, extending a little beyond the tip of the abdomen. Posterior tibiae pale yellow. Wings cinereous, hyaline. Fore wings with a lurid tinge and with two black stripes; first stripe costal, occupying all the base, extending to five-sixths of the length; second narrow, extending along the whole length of the hind border. Length of the body  $2\frac{1}{2}$  lines, of the wings 5 lines.

*Hab.* Guinea.

271. *CENTROTUS CONTRACTUS.* *Fæm.* Piceus, thorace cornibus duobus lateralibus longis arcuatis oblique ascendentibus et deflexis cornu postico longo gracili recto, abdomine subtus pedibusque pallide luteis, alis posticis nigricantibus.

*Female.* Piceous. Head and thorax minutely punctured. Thorax keeled, very thick, armed on each side with a stout, backward-curved, obliquely ascending and diverging horn, which is much longer than the whole breadth of the thorax; hind horn long, slender, straight. Abdomen beneath and legs pale luteous. Hind wings blackish; veins black. Length of the body  $2\frac{3}{4}$  lines, of the wings 5 lines.

*Hab.* Aru.

272. *CENTROTUS ALBIDUS.* *Mas.* Niger, crassus, thorace cornibus duobus lateralibus breviusculis subascendentibus cornu postico gracili subarenato abdominis apicem paullo superante, pedibus piceis tarsis fulvis, alis anticis basi, costæ dimidio margineque exteriore piceis.

*Male.* Black, thick, with slightly gilded pubescence. Thorax minutely

punctured, with a slight keel, armed on each side with a stout, diverging, slightly ascending horn, which is about one-third of the length of the intervening space; hind horn slender, slightly curved downwards to the tip, extending a little beyond the tip of the abdomen. Legs piceous; tarsi tawny. Wings cinereous; fore wings piceous and punctured at the base and along half of the length of the costa; hind border piceous towards the tip; veins pale. Length of the body 2 lines, of the wings 4 lines.

*Hab.* Mysol.

273. *CENTROTUS SUBFLAVIPES*. *Fæm.* Piceus, thorace cornibus duobus lateralibus cornu postico vix undulato abdominis apicem fere attingente lateraliter carinato, abdomine dorso albedo, pedibus pallide flavescentibus femoribus piceis, alis anticis lurido-hyalinis basi vitæ costali abbreviata piceis punctatis venis pallide flavescentibus, alis posticis pallide cinereis.

*Female.* Piceous. Thorax thick, scabrous, keeled, with a stout diverging horn on each side, hind part forming a hardly undulating horn, which has a keel on each side, and extends nearly to the tip of the abdomen. Abdomen whitish above. Legs pale yellowish; coxæ and femora piceous. Wings hyaline; fore wings lurid, with a piceous punctured costal stripe, which occupies all the base and extends from the base to two-thirds of the length; veins pale yellowish. Hind wings pale cinereous; veins black. Length of the body  $2\frac{1}{2}$  lines, of the wings 6 lines.

*Hab.* New Guinea.

274. *CENTROTUS DENSUS*. *Fæm.* Niger, thorace cornibus lateralibus nullis cornu postico recto abdominis apicem fere attingente, tibiis tarsisque rufescentibus, alis anticis fuscis basi nigris, alis posticis cinereo-hyalinis.

*Female.* Black, very thick. Head and thorax with gilded pubescence. Thorax minutely punctured, slightly keeled, its hind part forming a keeled straight horn, which extends almost to the tip of the abdomen. Tibiæ and tarsi reddish. Fore wings brown, black at the base. Hind wings cinereous, hyaline; veins black. Length of the body  $2\frac{1}{2}$ –3 lines, of the wings 6 lines.

*Hab.* New Guinea.

275. *CENTROTUS VENOSUS*. *Mas.* Niger, thorace cornibus lateralibus nullis cornu postico recto brevi, alis anticis fuscis basi nigris venis pallide testaceis marginibus concoloribus, alis posticis cinereo-hyalinis.

*Male.* Black, broad, thick, punctured. Head and thorax thickly covered with gilded pubescence; thorax with a slight keel, emitting a straight horn, which is much shorter than the abdomen. Legs with gilded

pubescence. Fore wings brown, black at the base; veins pale testaceous, and bordered with the same colour. Hind wings cinereous, hyaline; veins black. Length of the body 2 lines, of the wings 4 lines.

*Hab.* Tondano.

276. *CENTROTUS RETRACTUS*. *Mas.* Niger, thoracis cornu postico piceo recto gracili abdominis apicem attingente, pedibus fulvis coxis femoribusque nigris, his apice fulvis, alis cinereis, alis anticis basi nigris venis piceis.

*Male.* Black, thick, with slightly gilded pubescence. Head and thorax minutely punctured; thorax with a piceous, straight, horizontal hind horn, which is very slender towards its tip, and extends to the tip of the abdomen. Legs tawny, short, very stout; coxæ and femora black, the latter tawny towards the tips. Wings cinereous. Fore wings black and punctured towards the base; veins piceous. Hind wings with black veins. Length of the body  $2\frac{1}{2}$  lines, of the wings 5 lines.

*Hab.* Morty.

277. *CENTROTUS CONTERMINUS*. *Fem.* Niger, thoracis cornu postico gracili subarcuato abdominis apicem attingente, pectore plagis duabus canis, alis cinereis hyalinis, alis anticis lurido suffusis basi fuscis venis fulvis.

*Female.* Black, thick, with slightly gilded pubescence. Head and thorax thickly punctured. Thorax slightly keeled; hind horn slender, keeled, slightly curved downwards, extending to the tip of the abdomen. Pectus with a patch of hoary pubescence on each side. Wings cinereous, hyaline. Fore wings with a lurid tinge, brown and punctured at the base; veins tawny. Hind wings with black veins. Length of the body  $2\frac{1}{4}$  lines, of the wings  $5\frac{1}{2}$  lines.

*Hab.* Aru.

278. *CENTROTUS REDUCTUS*. *Fem.* Niger, thorace cornibus lateralibus nullis cornu postico subarcuato abdominis apicem attingente, alis anticis lurido-hyalinis basi nigris et punctatis venis pallide luteis, alis posticis cinereis.

*Female.* Black, broad, thick, minutely punctured. Thorax slightly keeled, armed with a slightly curved horn, which extends to the tip of the abdomen. Fore wings lurid, nearly hyaline, black and punctured at the base; veins pale luteous. Hind wings cinereous. Length of the body 2 lines, of the wings 4 lines.

*Hab.* New Guinea.

279. *CENTROTUS CURTULUS*. *Mas.* Niger, crassus, punctatus, capite thoraceque carinatis, fronte facieque minimis, thorace inermi, tarsis



rufescentibus, alis cinereo-hyalinis nigro venosis, alis anticis basi nigris et punctatis apices versus fuscis.

*Male.* Black, broad, thick, roughly punctured. Head and thorax with a slight keel; front and face very small. Thorax unarmed. Legs thick, pubescent; tarsi reddish. Wings cinereous, hyaline, with black veins. Fore wings black, coriaceous, and punctured at the base, dark brown towards the tips. Length of the body 2 lines, of the wings 4 lines.

*Hab.* Mysol.

Much resembles *C. genistæ*; but the scutellum extends to the tip of the abdomen.

280. *CENTROTUS NUBIFASCIA.* *Fæm.* Piccus, thoracis cornu postico gracili arcuato abdominis apicem vix attingente, pedibus ferrugineis coxis femoribusque nigris, alis cinereis hyalinis, alis anticis basi piceis fasciis duabus fuscis indeterminatis venis fulvis.

*Female.* Piccous, thick, with slightly gilded pubescence. Head and thorax minutely punctured. Thorax slightly keeled; hind horn keeled, slender, curved downwards, extending nearly to the tip of the abdomen. Legs ferruginous, short, stout; coxæ and femora black. Wings cinereous, hyaline. Fore wings obliquely piceous and punctured towards the base; two irregular and incomplete brown bands; veins tawny. Hind wings with piceous veins. Length of the body  $2\frac{1}{2}$  lines, of the wings 6 lines.

*Hab.* New Guinea.

281. *CENTROTUS MINUSCULUS.* *Mas et Fæm.* Niger, thoracis lateribus angulatis vix cornutis cornu postico gracili abdomine multo brevior, tibiis posticis tarsisque rufescentibus; alis cinereis semihyalinis nigro venosis; alis anticis basi nigris punctatis.

*Male and Female.* Black, thick, minutely punctured, with slightly gilded pubescence. Thorax keeled, angular but hardly horned on each side; hind part forming a slender horn, which is much shorter than the abdomen. Legs short, stout; tarsi and hind tibiæ reddish. Wings cinereous, semihyaline; veins black. Fore wings black and punctured at the base. Length of the body 2 lines, of the wings 4 lines.

*Hab.* Mysol; Sula.

282. *CENTROTUS BIPLAGA.* *Mas.* Niger, thorace piceo cornibus duobus lateralibus obliquis brevissimis cornu postico recto abdomine multo brevior, pedibus fulvis femoribus nigris, alis anticis piceis fascia antemedialia lata albida hyalina venis fulvis, alis posticis cinereo-hyalinis.

*Male.* Black, dull, thick, punctured, with gilded pubescence. Thorax piceous, keeled, with an oblique furrow on each side, where it forms an oblique and extremely short horn; hind part prolonged into a

straight horn, which is much shorter than the abdomen. Legs tawny, very pubescent; coxæ and femora black. Fore wings piceous, with a broad whitish hyaline band near the base; veins tawny. Hind wings cinereous, hyaline; veins black. Length of the body  $2\frac{1}{2}$  lines, of the wings 5 lines.

*Hab.* Celebes; Waigiou.

283. *CENTROTUS CONSTIPATUS*. *Mas.* Fulvus, thorace vittis duabus nitidioribus lateribus subgibbosis cornu postico recto abdominis apicem attingente, alis pellucidis nigro venosis, alis anticis basi fasciisque duabus fuscis.

*Male.* Tawny, thick. Thorax minutely punctured, keeled, slightly gibbous on each side, with a brighter tawny stripe on each side of the keel; hind part forming a horizontal horn, which is very slender towards its tip, and extends to the tip of the abdomen. Legs short, stout. Wings pellucid; veins black. Fore wings brown towards the base, and with two brown bands. Length of the body  $1\frac{1}{4}$  line, of the wings  $2\frac{1}{2}$  lines.

*Hab.* Mysol.

284. *CENTROTUS IMPRESSUS*. *Fem.* Niger, nitens, fere glaber, thorace non carinato cornibus duobus lateralibus parvis acutis cornu postico basi utrinque tumido apicem versus gracillimo abdominis apicem superante, tibiis tarsisque piceis, alis anticis fuscis semihyalinis basi albidis vitta costali nigra abbreviata.

*Female.* Black, shining, nearly smooth. Thorax not keeled, armed on each side with a diverging, slender, acute horn, which is hardly longer than half the intermediate breadth; hind horn keeled, rounded, and tumid on each side near the base, very slender thence to the tip, which extends somewhat beyond the tip of the abdomen. Tibiæ and tarsi piceous. Fore wings brown, semihyaline, whitish towards the base; costa black from the base to two-thirds of the length. Length of the body 4 lines, of the wings 8 lines.

*Hab.* New Guinea.

#### GENUS *NARNIA*.

*Mas.* *Corpus* robustum. *Caput* carinatum, thorace angustius; vertex transversus; frons convexa. *Scuti* latera subdilatata. *Scutellum* productum, abdominis apicem longe superans, dimidio apicali gracillimo subarcuato. *Pedes* robusti, breves. *Alæ* venis paucis.

*Male.* Body stout. Head keeled, narrower than the thorax; vertex full twice as broad as long; front convex. Scutum slightly dilated on each side; scutellum prolonged much beyond the tip of the abdomen, thick for nearly half its length, very

slender and slightly curved thence to the tip. Legs stout, short. Wings with few veins.

285. *NARNIA RASTRATA*. *Mas.* Fulva, scutello strigis quatuor pallide flavis, abdomine fascia basali lata pallide flava, alis diaphanis venis pallide flavis.

*Male.* Tawny. Scutellum with a pale-yellow streak on each side at its base, and with another on each side of the base of the slender part. Abdomen with a broad pale-yellow band at its base. Wings pellucid; veins pale-yellow. Length of the body 2 lines, of the wings 4 lines.

*Hab.* Flores.

#### Gen. SARANTUS, *Stål*.

286. *SARANTUS WALLACEI*, *Stål*, Trans. Ent. Soc. Lond. 3rd ser. i. 592.

*Hab.* Waigiau.

#### EXPLANATION OF PLATE III.

Fig. 1. *Dictyophora nigrifinis*.

2. *Ulasia magica*.

3. *Acarna rostrifera*.

4. *Hariola tiarata*.

5. *Interamma angusta*.

6. *Interamma delicata*.

7. *Acrilla adipata*.

8. *Corethrura funebris*.

9. *Acarna notaticollis*.

10. *Polydictya collaris*.

11. *Philagra Douglasi*.

12. *Sarantus Wallacei*.

13. *Ricania cribrata*.

14. *Birdantis decens*.

15. *Ricania latipennis*.

#### Note on the Discovery of *Planaria terrestris* in England.

By Sir JOHN LUBBOCK, Bart., Vice-President.

ALTHOUGH *Planaria terrestris* was discovered by Müller in Denmark as long ago as the year 1774, and is a species of much interest, it has never yet been observed in Great Britain; and having found it not unfrequently in Kent during the last year, I have thought that it would be desirable to place its occurrence on record, more especially as it is the only species of land-*Planaria* yet discovered in Western Europe. It was described by